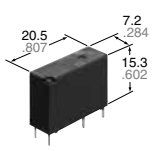
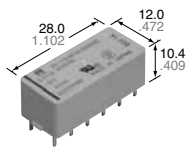
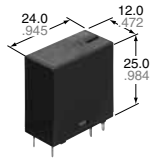
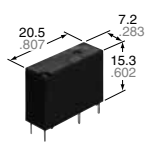
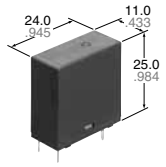
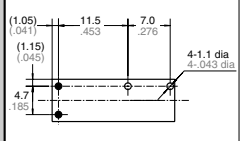
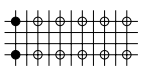
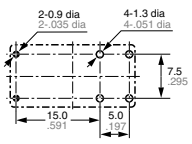
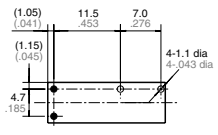
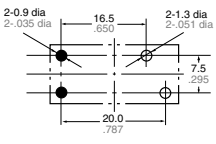
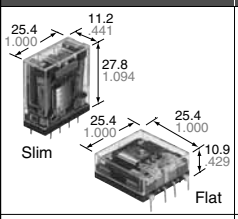
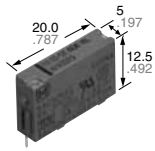
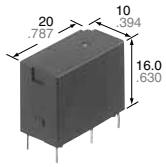
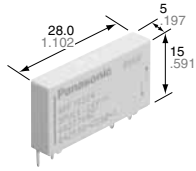
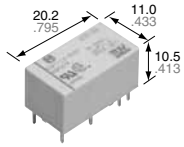
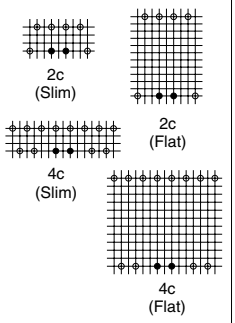
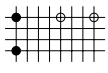
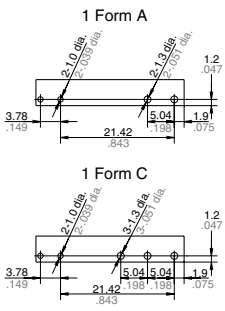
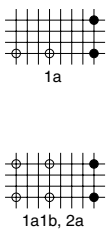
Relay Selector Chart

Order of products: Max. contact rating (small to large)

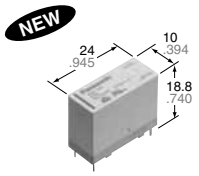
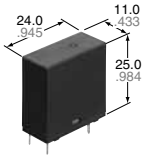
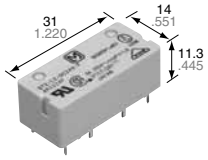
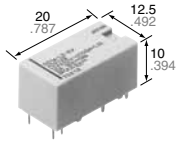
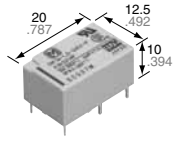
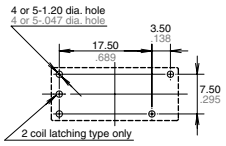
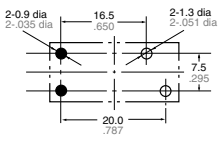
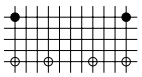
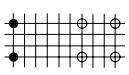
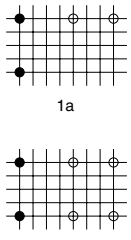
• Products		Power Relays (2A or more)				
		LD RELAY (ALD)	S RELAY	LA RELAY (ALA)	LD-P RELAY (ALDP)	LK-T RELAY
• Type of relay mm inch						
• Features		• 1a 3A slim power relays	• 2a2b/3a1b/4a 4A polarized power relays	• TV-4 rated. • 2a 3A/5A power relays	• 1a 5A slim power relay	• TV-8 rated. • 1a 5A power relays
• Sealed types availability		●	●	—	●	—
• Latching types availability		—	●	—	—	—
• Contact material (Optional material)		AgNi type	Au clad silver alloy (cadmium free)	AgNi type + Au clad / $AgSnO_2$ type	AgNi type	$AgSnO_2$ type
• Contact rating chart Maximum (cos φ = 1)	30 A 20 A 15 A 10 A 8 A 5 A 3 A	3A 277V AC 3A 30V DC	4A 250V AC 3A 30V DC	3A 125V AC 5A 277V AC	5A 277V AC	5A 277V AC
Minimum (For Reference)		100mA 5V DC	100μA 100mV DC	100mA 5V DC	100mA 5V DC	100mA 5V DC
• Max. switching voltage		30V DC, 277V AC	48V DC, 250V AC	125V AC / 277V AC	277V AC	277V AC
• Contact arrangement		1a	2a2b, 3a1b, 4a	2a	1a	1a
• Life (Min. operation)	Electrical	2×10^5 (3A 125V AC, 3A 30V DC) 10^5 (3A 250V AC)	10^5(AC) 2×10^5(DC)	5×10^4	2×10^5 (5A 125V AC) 10^5 (5A 250V AC)	10^5
	Mechanical	5×10^6	10^8	10^6	5×10^6	10^6
• Breakdown voltage	Between open contacts	750Vrms	750Vrms	1,000Vrms	750Vrms	1,000Vrms
	Between contacts sets	—	1,000Vrms	1,000Vrms	—	—
	Between contacts and coil	4,000Vrms	1,500Vrms	4,000Vrms	4,000Vrms	4,000Vrms
	Between live parts and ground	—	—	—	—	—
• Surge withstand voltage		Min. 10,000V	—	Min. 10,000V	Min. 10,000V	Min. 10,000V
• Coil voltage		(DC) 4.5, 5, 6, 9, 12, 18, 24V	(DC) 3, 5, 6, 12, 24, 48V	(DC) 12, 24V	(DC) 5, 6, 9, 12, 18, 24V	(DC) 5, 9, 12, 24V
• Nominal operating power		200mW	200mW	530mW	200mW	250mW
• Terminal layout (Bottom View) •: coil terminal (.100 inch grid) mm inch						
• Standards		UL, CSA, TÜV, VDE	UL, CSA	UL, CSA, TÜV, SEMKO, VDE	UL, CSA, VDE	UL, C-UL, TÜV, SEMKO, VDE
• Mounting method						

Note: Meaning of symbol marks : PC board terminal; :Plug-in; : Top-mounting; : Top-mounting with PC board terminals; : Surface-mounting

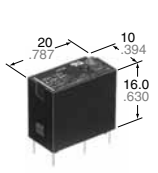
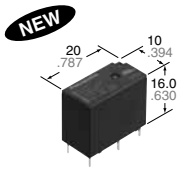
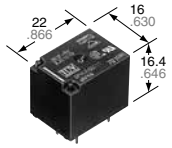
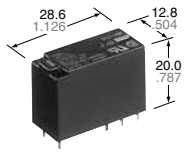
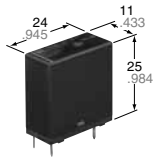
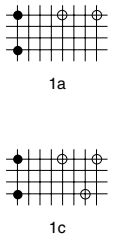
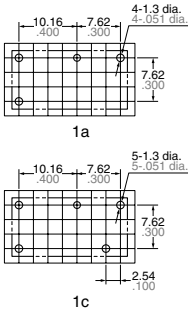
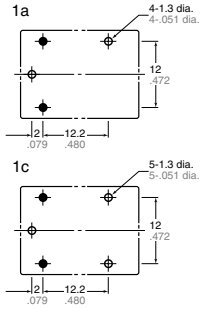
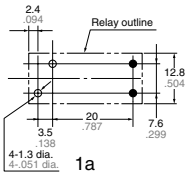
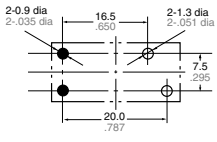
• Products	Power Relays (2A or more)				
	NC RELAY	**PA RELAY**	**PQ RELAY**	**PF RELAY (APF)**	**DS-P RELAY**
• Type of relay mm inch					
• Features	• Transistor drive • 2c/4c 5A slim power relays	• 1a 5A slim power relay for interface	• 1a 5A small size power relay for interface	• Compliant with European standards • 1a/1c 6A Slim power relays	• 1a 8A, 1a1b/2a 5A small polarized power relays
• Sealed types availability	●	●	●	●	●
• Latching types availability	—	—	—	—	●
• Contact material (Optional material)	Au clad AgNi type	Au clad AgNi type	Au clad AgNi type	AgNi type, Au plated AgNi type	Au flashed $AgSnO_2$ type
• Contact rating chart Maximum (cos φ = 1)	30 A 20 A 15 A 10 A 8 A 5 A 3 A 2c: 5A 250V AC 4c: 4A 250V AC 5A 30V DC	5A 250V AC 5A 30V DC	5A 250V AC 5A 30V DC	6A 250V AC	8A 250V AC 5A 30V DC 5A 250V AC 5A 30V DC 1a 1a1b, 2a
Minimum (For Reference)	100μA 1V DC	100μA 100mV DC	100μA 100mV DC	1mA 1V DC (Au plating)	10mA 5V DC 10mA 5V DC
• Max. switching voltage	250V AC	110V DC, 250V AC	110V DC, 250V AC	250V AC	125V DC, 380V AC
• Contact arrangement	2c, 4c	1a	1a	1a, 1c	1a, 1a1b, 2a
• Life (Min. operation) Electrical	10^5 (5A 250V AC) 5×10^5 (5A 30V DC)	10^5 (3A 250V AC, 30V DC) 5×10^4 (5A 250V AC, 30V DC)	2×10^5 (5A 125V AC) 10^5 (5A 250V AC)	5×10^4 (N.O.) 3×10^4 (N.C.)	10^5
• Life (Min. operation) Mechanical	(AC) 10^7 (DC) 5×10^7	2×10^7	2×10^7	5×10^6	5×10^7
• Breakdown voltage: Between open contacts	1,000Vrms	1,000Vrms	1,000Vrms	1,000Vrms	1,000Vrms
• Breakdown voltage: Between contacts sets	1,000Vrms	—	—	—	2,000Vrms (1a1b, 2a)
• Breakdown voltage: Between contacts and coil	2,000Vrms	2,000Vrms	4,000Vrms	4,000Vrms	3,000Vrms
• Breakdown voltage: Between live parts and ground	—	—	—	—	—
• Surge withstand voltage	—	—	—	Min. 6,000V	Min. 5,000V
• Coil voltage	(DC) 3, 5, 6, 12, 24, 48, 100V (AC) 12, 24, 48, 100V	(DC) 5, 6, 9, 12, 18, 24V	(DC) 3, 5, 6, 9, 12, 18, 24V	(DC) 4.5, 5, 6, 9, 12, 18, 24, 48, 60V	(DC) 3, 5, 6, 9, 12, 24V
• Nominal operating power	(2c) 1.05VA (4c) 1.30VA (2c) 360mW (4c) 720mW	120mW, 180mW	200mW	170mW, 217mW, 175mW	300mW
• Terminal layout (Bottom View) •: coil terminal (.100 inch grid) mm inch					
• Standards	UL, CSA	UL, CSA, TÜV	UL, CSA, VDE, TÜV, SEMKO	UL, C-UL, VDE	UL, CSA, TÜV
• Mounting method					

Note: Meaning of symbol marks : PC board terminal; :Plug-in; : Top-mounting; : Top-mounting with PC board terminals; : Surface-mounting

Relay Selector Chart

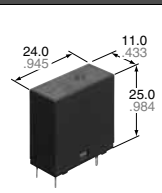
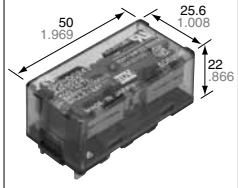
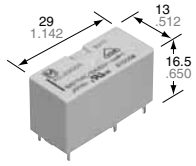
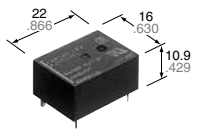
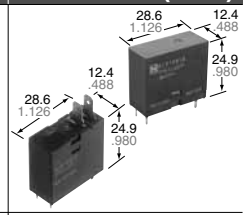
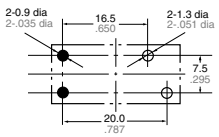
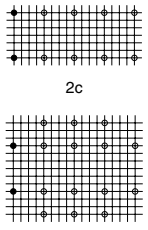
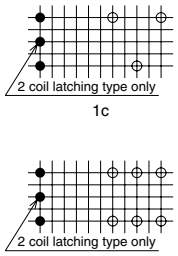
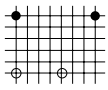
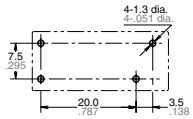
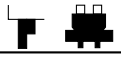
• Products		Power Relays (2A or more)				
		DW RELAY	LK-Q RELAY	ST RELAY	DE RELAY (ADE)	DK RELAY
• Type of relay mm inch						
• Features		• 1 Form A 8A, Small Polarized Power Relays (Latching type) with 12,000 V surge breakdown voltage	• TV-5/TV-8 rated. • 1a 5A/8A silent type power relays	• 1a1b/2a 8A polarized power relays	• Compliant with European standards • 1a1b 10A/8A polarized power relays	• 1a 10A, 1a1b/2a 8A small polarized power relays
• Sealed types availability		—	—	●	●	●
• Latching types availability		● (Latching type only)	—	●	●	●
• Contact material (Optional material)		$AgSnO_2$ type	$AgSnO_2$ type	Au flashed $AgSnO_2$ type	$AgSnO_2$ type	$AgSnO_2$ type / Au flashed AgNi type
• Contact rating chart Maximum (cos φ = 1)		30 A 20 A 15 A 10 A 8 A 5 A 3 A 8A 250V AC	5A 277V AC 8A 277V AC	8A 250V AC	10A 250V AC 10A 30V DC 8A 250V AC 8A 30V DC 1a 1a1b, 2a	10A 250V AC 10A 30V DC 8A 250V AC 8A 30V DC 1a 1a1b, 2a
Minimum (For Reference)		100mA 5V DC	100mA 5V DC	100mA 5V DC		10mA 5V DC / 10mA 5V DC
• Max. switching voltage		250V AC	277V AC	250V DC, 380V AC	230V DC, 440V AC	125V DC, 250V AC
• Contact arrangement		1a	1a	1a1b, 2a	1a, 1a1b, 2a	1a, 1a1b, 2a
• Life (Min. operation)	Electrical	5×10^4	10^5	10^5	10^5	10^5
	Mechanical	10^6	10^6	10^7	10^7	5×10^7
• Breakdown voltage	Between open contacts	1,000Vrms	1,000Vrms	1,200Vrms	1,000Vrms	1,000Vrms
	Between contacts sets	—	—	2,000Vrms	4,000 Vrms (2a, 1a1b)	—
	Between contacts and coil	5,000Vrms	4,000Vrms	3,750Vrms	5,000Vrms	4,000Vrms
	Between live parts and ground	—	—	—	—	—
• Surge withstand voltage		Min. 12,000V	Min. 10,000V	Min. 6,000V	Min. 12,000V	Min. 10,000V
• Coil voltage		(DC) 3, 5, 6, 9, 12, 24V	(DC) 5, 9, 12, 24V	(DC) 3, 5, 6, 9, 12, 24, 48V	(DC) 5, 12, 24V	(DC) 3, 5, 6, 9,12, 24V
• Nominal operating power		200mW (1 coil latching type) 400mW (2 coil latching type)	250mW	240mW	200mW	200mW
• Terminal layout (Bottom View) •: coil terminal (.100 inch grid) mm inch						
• Standards		UL, C-UL, VDE	UL, C-UL, TÜV, SEMKO	UL, CSA, VDE, SEV, TV rating	UL, CSA, VDE	UL, CSA, TÜV
• Mounting method						

Note: Meaning of symbol marks : PC board terminal; :Plug-in; : Top-mounting; : Top-mounting with PC board terminals; : Surface-mounting

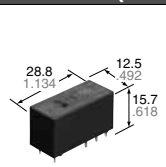
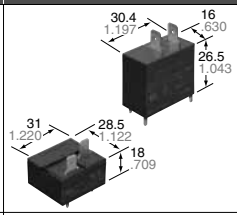
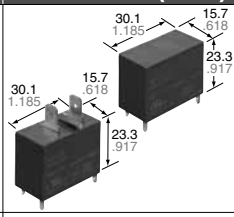
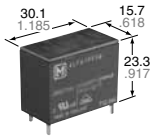
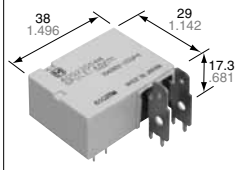
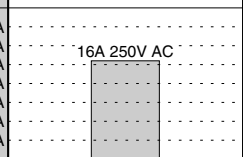
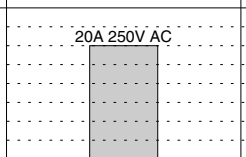
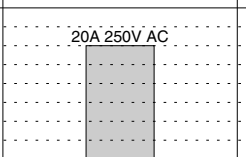
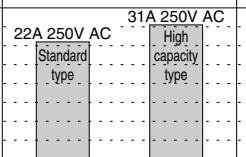
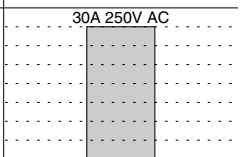
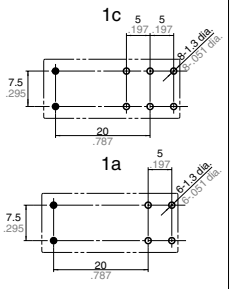
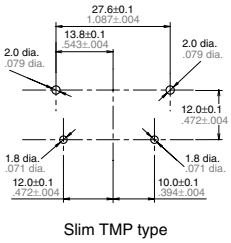
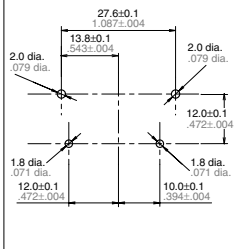
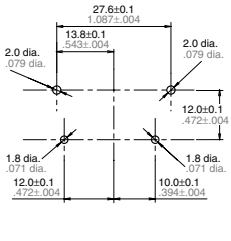
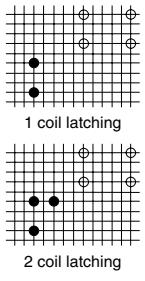
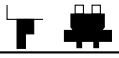
• Products	Power Relays (2A or more)				
	JQ RELAY	**LQ RELAY (ALQ)**	**JS RELAY**	**JW RELAY**	**LK-G RELAY**
• Type of relay mm inch					
• Features	• 1a/1c 5A/10A small power relays	• 1a/1c 10A small power relays	• 1a/1c 10A cubic type power relays	• Ideal for power supply • 1a/1c/2a/2c/5A/10A power relays	• 1mm contact gap. 1a 10A/16A power relays • TV-5 rated
• Sealed types availability	●	●	● (1a, 1c)	●	—
• Latching types availability	—	—	—	—	—
• Contact material (Optional material)	$AgSnO_2$ type	AgNi type	$AgSnO_2$ type	1a: $AgSnO_2$ type 1c, 2a, 2c: AgNi type	$AgSnO_2$ type
• Contact rating chart Maximum (cos φ = 1)	30 A 20 A 15 A 10 A 8 A 5 A 3 A 5A 30V DC 10A 125V AC (NO) 5A 250V AC (NO) 5A 30V DC 5A 125V AC (NO) 2A 125V AC (NO)	5A 30V DC 10A 125V AC 5A 250V AC	10A 125V AC 10A 277V AC 6A 277V AC	10A 250V AC 10A 30V DC 5A 250V AC 5A 30V DC	16A 277V AC 10A 277V AC
Minimum (For Reference)	Standard High capacity 100mA 5V DC	100mA 5V DC	1a Long life 100mA 5V DC	Standard (1a, 1c, 2a, 2c) High capacity (1a, 1c) 100mA 5V DC	100mA 5V DC
• Max. switching voltage	110V DC(0.3A), 250V AC	250V AC	100V DC(0.5A), 250V AC	30V DC, 250V AC	277V AC
• Contact arrangement	1a, 1c	1a, 1c	1a, 1c, 1a (Long life type)	Standard: 1a, 1c, 2a, 2c High capacity: 1a, 1c	1a
• Life (Min. operation) Electrical	5×10^4 (1a standard, 5A 125V AC)	5×10^4	10^5 2×10^5 (Long life type)	10^5	10^5 (10A type) 5×10^4 (16A type)
• Life (Min. operation) Mechanical	10^7	10^7	10^7	5×10^6	2×10^6
• Breakdown voltage: Between open contacts	1a: 1,000Vrms 1c: 750Vrms	1a: 1,000Vrms 1c: 750Vrms	750Vrms	1,000Vrms	1,000Vrms
• Breakdown voltage: Between contacts sets	—	—	—	3,000Vrms (2a, 2c)	—
• Breakdown voltage: Between contacts and coil	4,000Vrms	4,000Vrms	1,500Vrms	5,000Vrms	4,000Vrms
• Breakdown voltage: Between live parts and ground	—	—	—	—	—
• Surge withstand voltage	Min. 8,000V	Min. 8,000V	—	Min. 10,000V	Min. 10,000V
• Coil voltage	(DC) 5, 6, 9, 12, 18, 24, 48V	(DC) 5, 6, 9, 12, 18, 24V	(DC) 5, 6, 9, 12, 18, 24, 48V	(DC) 6, 9,12, 24, 48V	(DC) 5, 9, 12, 24V
• Nominal operating power	1a: 200mW 1c: 400mW	1a: 200mW 1c: 400mW	360mW	530mW	530mW
• Terminal layout (Bottom View) •: coil terminal (.100 inch grid) mm inch					
• Standards	UL, CSA, TÜV, VDE, SEMKO	UL, C-UL, VDE	UL, CSA, TÜV, VDE	UL, CSA, VDE, SEMKO, FIMKO, TÜV, SEV	UL, C-UL, TÜV
• Mounting method					

Note: Meaning of symbol marks : PC board terminal; :Plug-in; : Top-mounting; : Top-mounting with PC board terminals; : Surface-mounting

Relay Selector Chart

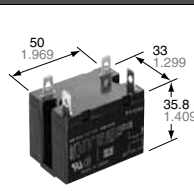
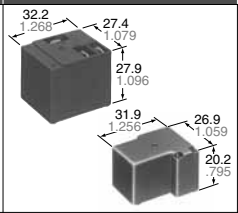
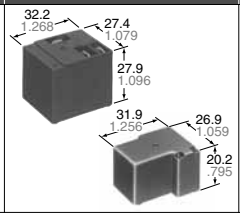
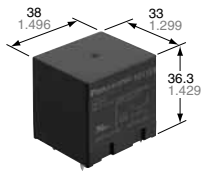
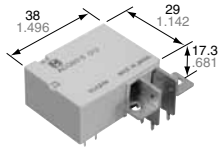
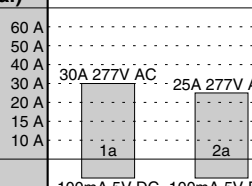
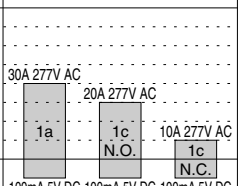
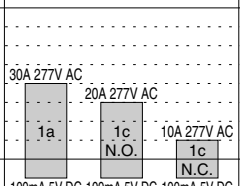
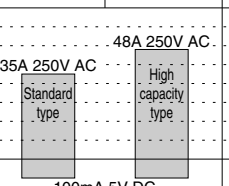
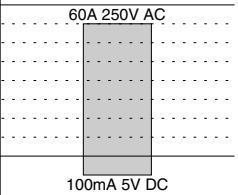
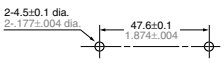
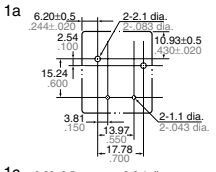
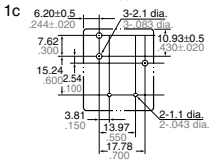
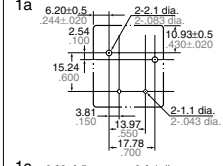
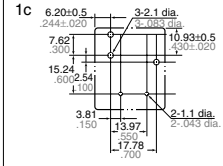
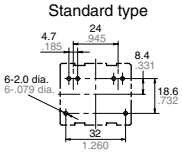
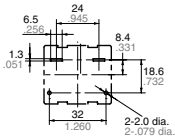
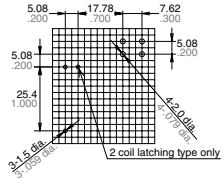
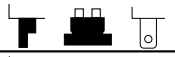
• Products	Power Relays (2A or more)				
	LK-P RELAY	SP RELAY	DJ RELAY (ADJ)	JV-N RELAY	LE RELAY (ALE)
• Type of relay mm inch					
• Features	• 1a 10A TV-5 rated power relays	• 2c 15A, 4c 10A polarized power relays	• 1-pole/2-pole 16A polarized power relays	• Ideal for heater control • 1a 16A, 10.9 mm height flat power relays	• 1a 16A power relay for micro wave oven
• Sealed types availability	—	—	●	●	—
• Latching types availability	—	●	●	—	—
• Contact material (Optional material)	$AgSnO_2$ type	Stationary: Au flashed $AgSnO_2$ type Movable: $AgSnO_2$ type	$AgSnO_2$ type / Au flashed $AgSnO_2$ type	$AgSnO_2$ type	$AgSnO_2$ type
• Contact rating chart Maximum (cos φ = 1)	10A 277V AC 5A 30V DC	15A 250V AC 10A 250V AC 2c 4c	16A 250V AC 10A 250V AC 1a 1b 1c 1a1b 2a 2b 2c	10A 30V DC 16A 125V AC	16A 277V AC
Minimum (For Reference)	100mA 5V DC	100mA 5V DC	100mA 5V DC / 100mA 5V DC	100mA 5V DC	100mA 5V DC
• Max. switching voltage	30V DC, 277V AC	30V DC, 250V AC	250V AC	30 V DC, 277 V AC	277V AC
• Contact arrangement	1a	2c, 4c	1a, 1b, 1c, 1a1b, 2a, 2b, 2c	1a	1a
• Life (Min. operation) Electrical	10^5	10^5	10^5	10^5	10^5
• Life (Min. operation) Mechanical	2×10^6	5×10^7	5×10^6	2×10^7	2×10^6
• Breakdown voltage: Between open contacts	1,000Vrms	1,500Vrms	1,000Vrms	1,000Vrms	1,000Vrms
• Breakdown voltage: Between contacts sets	—	3,000Vrms	—	—	—
• Breakdown voltage: Between contacts and coil	4,000Vrms	3,000Vrms	4,000Vrms	2,500Vrms	4,000Vrms
• Breakdown voltage: Between live parts and ground	—	—	—	—	—
• Surge withstand voltage	Min. 10,000V	—	Min. 10,000V	Min. 4,500V	Min. 10,000V
• Coil voltage	(DC) 5, 9, 12, 24V	(DC) 3, 5, 6, 12, 24, 48V	(DC) 5, 6, 12, 24, 48V	(DC) 4.5, 6, 9, 12, 18, 24, 48, 100V	(DC) 5, 6, 9, 12, 18, 24, 48V
• Nominal operating power	530mW	300mW	250mW	(DC) 4.5V to 48V: 200mW (DC) 100V: 600mW	200mW 400mW
• Terminal layout (Bottom View) •: coil terminal (.100 inch grid) mm inch					 (TMP type are also available)
• Standards	UL, CSA, TÜV, SEMKO, VDE	UL, CSA, TÜV	UL, C-UL, VDE	UL, CSA, TÜV	UL, CSA, TÜV, VDE, SEMKO
• Mounting method					

Note: Meaning of symbol marks : PC board terminal; :Plug-in; : Top-mounting; : Top-mounting with PC board terminals; : Surface-mounting

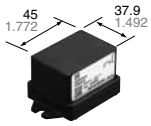
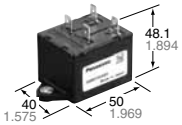
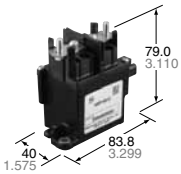
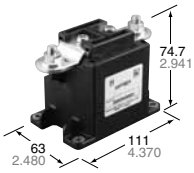
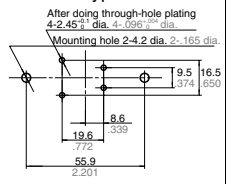
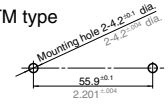
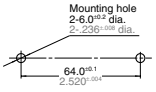
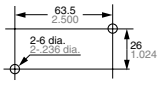
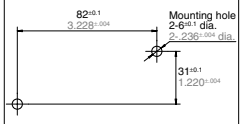
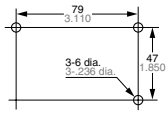
• Products	Power Relays (2A or more)				
	LZ RELAY (ALZ)	JM RELAY	LF RELAY (ALF)	LF-G RELAY (ALFG)	DQ RELAY (ADQ)
• Type of relay mm inch					
• Features	• Low profile: 15.7mm height • 1a/1c 16A power relay	• Ideal for compressor and motor control • Inrush 80A, 1a 20A power relay	• Ideal for air conditioner • 1a 20A power relays	• Ideal for solar inverter compact size, 1a 22A/ 31A power relays	• 1a 30A polarized power relays
• Sealed types availability	●	—	—	—	●
• Latching types availability	—	—	—	—	● (Latching type only)
• Contact material (Optional material)	$AgSnO_2$ type	$AgSnO_2$ type	$AgSnO_2$ type	$AgSnO_2$ type	$AgSnO_2$ type
• Contact rating chart Maximum (cos φ = 1)					
Minimum (For Reference)	100mA 5V DC	100mA 5V DC	100mA 5V DC	100mA 5V DC	100mA 5V DC
• Max. switching voltage	440V AC	250V AC	250V AC	250V AC	250V AC
• Contact arrangement	1a, 1c	1a	1a	1a	1a
• Life (Min. operation) Electrical	10^5 (NO) 5×10^4 (NC)	10^5	10^5	3×10^4	10^4
• Life (Min. operation) Mechanical	10^7	10^6	2×10^6	10^6	10^6
• Breakdown voltage: Between open contacts	1,000Vrms	1,000Vrms	1,000Vrms	2,500Vrms	1,500Vrms
• Breakdown voltage: Between contacts sets	—	—	—	—	—
• Breakdown voltage: Between contacts and coil	5,000Vrms	5,000Vrms	5,000Vrms	4,000Vrms	4,000Vrms
• Breakdown voltage: Between live parts and ground	—	—	—	—	—
• Surge withstand voltage	Min. 10,000V	Min. 10,000V	Min. 10,000V	Min. 6,000V	Min. 10,000V
• Coil voltage	(DC) 5, 9, 12, 18, 24, 48V	(DC) 5, 6, 9, 12, 24, 48V	(DC) 5, 6, 9,12, 18, 24V	(DC) 9, 12, 18, 24V	(DC) 4.5, 6, 9, 12, 24V
• Nominal operating power	400mW	0.9 W	900mW	1,400mW	500mW (1 coil latching) 1,000mW (2 coil latching)
• Terminal layout (Bottom View) •: coil terminal (.100 inch grid) mm inch		 Slim TMP type			
• Standards	UL, C-UL, VDE	UL, CSA, VDE	UL, C-UL, TÜV, VDE	UL, C-UL, VDE	UL, C-UL
• Mounting method					

Note: Meaning of symbol marks : PC board terminal; :Plug-in; : Top-mounting; : Top-mounting with PC board terminals; : Surface-mounting

Relay Selector Chart

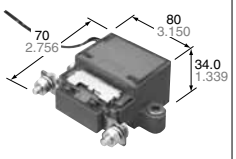
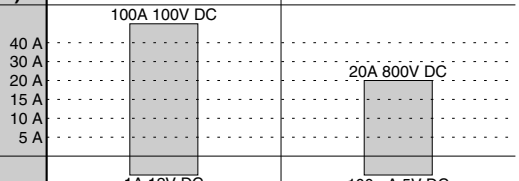
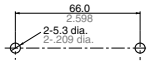
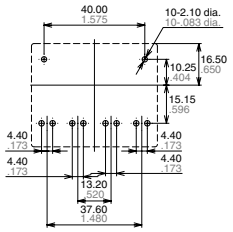
• Products		Power Relays (2A or more)				
		HE RELAY	JT-V RELAY	JT-N RELAY	HE RELAY PV TYPE	DQ-M RELAY (ADQM)
• Type of relay mm inch						
• Features		• TV-10/TV-15 rated • 1a 30A, 2a 20A power relays	• Surge withstand voltage: 6kV • 1a/1c 30A power relays	• High switching capacity • 1a/1c 30A power relays	• Ideal for solar inverter compact size, 1a 35A/48A power relays	• 60A power latching relays
• Sealed types availability		—	●	●	—	—
• Latching types availability		—	—	—	—	● (Latching type only)
• Contact material (Optional material)		$AgSnO_2$ type	$AgSnO_2$ type	$AgSnO_2$ type	$AgSnO_2$ type / AgNi type	AgNi type
• Contact rating chart Maximum (cos φ = 1)						
Minimum (For Reference)		100mA 5V DC 100mA 5V DC	100mA 5V DC 100mA 5V DC 100mA 5V DC	100mA 5V DC 100mA 5V DC 100mA 5V DC	100mA 5V DC	100mA 5V DC
• Max. switching voltage		30VDC, 277V AC	277V AC	277V AC	250V AC	250V AC
• Contact arrangement		1a, 2a	1a, 1c	1a, 1c	1a	1a
• Life (Min. operation)	Electrical	2×10^5	10^5 (20A 277V AC) 10^5 (N.O.)(20A 277V A) 10^5 (N.C.)(10A 277V A)	10^5 (20A 277V AC) 10^5 (N.O.)(20A 277V A) 10^5 (N.C.)(10A 277V A)	3×10^4	10^3 (60A 250V AC) 10^4 (50A 250V AC)
	Mechanical	DC: 10^7 AC: 5×10^6	10^7	10^7	10^7	10^6
• Breakdown voltage	Between open contacts	2,000Vrms	1,200Vrms	1,200Vrms	2,000Vrms	1,500Vrms
	Between contacts sets	4,000Vrms (2a)	—	—	—	—
	Between contacts and coil	5,000Vrms	3,500Vrms	2,500Vrms	5,000Vrms	4,000Vrms
	Between live parts and ground	—	—	—	—	—
• Surge withstand voltage		Min. 10,000V	6,000V	—	Min. 10,000V	Min. 10,000V
• Coil voltage		(AC) 12, 24, 48, 100/120, 200/240V (DC) 6, 12, 24, 48, 100, 110V	(DC) 12, 18, 24, 48V	(DC) 5, 6, 9, 12, 15, 18, 24V	(DC) 6, 9, 12, 24V (Standard type DC9V only)	(DC) 4.5, 6, 9, 12, 24V
• Nominal operating power		(AC) 1.7 to 2.7VA (DC) 1.92W	1,000mW	800mW	1,920mW	500mW (1 coil latching) 1,000mW (2 coil latching)
• Terminal layout (Bottom View) •: coil terminal (.100 inch grid) mm inch		Panel cutout  (Plug-in terminal type) (Screw terminal type)  (TM type) (Screw terminal type <wide pitch>)	1a  1c 	1a  1c 	Standard type  High capacity type 	
• Standards		UL, CSA, VDE, TÜV	UL/C-UL	UL, CSA	UL, CSA, VDE / C-UL, VDE	—
• Mounting method						

Note: Meaning of symbol marks : PC board terminal; :Plug-in; : Top-mounting; : Top-mounting with PC board terminals; : Surface-mounting

• Products	High-capacity DC cutoff Relays EP RELAY (AEP)				
• Type of relay mm inch	 10A	 20A TM Type	 80A	 200A	 300A
• Features	• High Capacity of Max. 1,000 V DC Cut-off Possible				
• Sealed types availability	●				
• Latching types availability	—				
• Contact material (Optional material)	Molybdenum type	Copper type alloy	Tungsten type/ Copper type alloy	Copper type alloy	Copper type alloy
• Contact rating chart Maximum (cos φ = 1)	10A 400V DC	20A 400V DC	80A 400V DC	200A 400V DC	300A 400V DC
Minimum (For Reference)	1A 6V DC	1A 12V DC	—	1A 12V DC	1A 24V DC
• Max. switching voltage	10A 400V DC	20A 400V DC	80A 400V DC	200A 400V DC	300A 400V DC
• Contact arrangement	1a	1a	1a	1a	1a
• Life (Min. operation) Electrical	7.5×10^4 10A 400V DC (Switching frequency: 20 times/min)	3×10^3 20A 400V DC (Switching frequency: 6 times/min)	10^3 80A 400V DC (Switching frequency: 20 times/min)	3×10^3 200A 400V DC (Switching frequency: 20 times/min)	10^3 300A 400V DC (Switching frequency: 6 times/min)
• Life (Min. operation) Mechanical	10^5	2×10^5	2×10^5	2×10^5	2×10^5
• Break-down voltage: Between open contacts	2,500Vrms				
• Break-down voltage: Between contacts sets	—				
• Break-down voltage: Between contacts and coil	2,500Vrms				
• Break-down voltage: Between live parts and ground	—	—	—	—	—
• Surge withstand voltage	—	—	—	—	—
• Coil voltage	(DC) 12, 24, 48, 100V	(DC) 12, 24V	(DC) 12, 24V	(DC) 12, 24V	(DC) 12, 24V
• Nominal operating power	Max. 1.24W	3.9W	Max. 4.2W	Max. 6W	Max. 40W (ON, 0.1s) to Max. 4W
• Terminal layout (Bottom View) •: coil terminal (.100 inch grid) mm inch	PC board type  TM type 				
• Standards	UL, C-UL	UL	UL, C-UL	—	—
• Mounting method			Screw terminal blocks	Two M6 bolts	Screw terminal blocks

Note: Meaning of symbol marks : PC board terminal; :Plug-in; : Top-mounting; : Top-mounting with PC board terminals; : Surface-mounting

Relay Selector Chart

• Products		High-capacity DC cutoff Relays	
		EJ RELAY (AEJ)	HE-V RELAY
• Type of relay mm inch			
• Features		• High capacity DC cutoff 100A at 100V DC	• 1,000V DC 20A cut-off possible high capacity DC power relays
• Sealed types availability		—	—
• Latching types availability		—	—
• Contact material (Optional material)		Silver type alloy	AgNi type
• Contact rating chart Maximum (cos φ = 1)			
Minimum (For Reference)		1A 12V DC	100mA 5V DC
• Max. switching voltage		100A 100V DC	20A 800V DC
• Contact arrangement		1a	2a
• Life (Min. operation)	Electrical	10^4 (100A 100V DC)	10^3
	Mechanical	10^6	10^6
• Breakdown voltage	Between open contacts	1,500Vrms	2,000Vrms
	Between contacts sets	—	—
	Between contacts and coil	2,500Vrms	5,000Vrms
	Between live parts and ground	—	—
• Surge withstand voltage		—	Min. 10,000V
• Coil voltage		(DC) 12, 24V	(DC) 6, 9, 12, 15, 24V
• Nominal operating power		5W	1,920mW
• Terminal layout (Bottom View) •: coil terminal (.100 inch grid) mm inch			
• Standards		—	C-UL, VDE
• Mounting method		Screw terminal blocks	

Note: Meaning of symbol marks : PC board terminal; :Plug-in; : Top-mounting; : Top-mounting with PC board terminals; : Surface-mounting