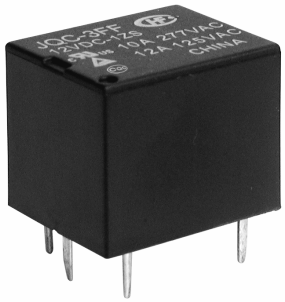
JQC-3FF SUBMINIATURE HIGH POWER RELAY

File No.:R50034671

File No.:E133481

File No.:CQC02001001953



Features

* Extremely low cost
* SPST-NO & SPDT configuration
* Subminiature, standard PCB layout
* Sealed IP67 and Flux proof types available

CONTACT DATA

Contact Arrangement	1A	1C
Initial Contact Resistance Max.		100mΩ (at 1A 6VDC)
Contact Material		Silver Alloy
Contact Rating (Res. Load)	10A 277VAC	7A 250VDC 10A 277VAC
Max. switching voltage		277VAC/30VDC
Max. switching current	15A	10A
Max. switching power		2770VA 210W
Mechanical life		1 x 10^7OPS
Electrical life		1 x 10^5OPS

CHARACTERISTICS

Initial Insulation Resistance		100MΩ ,500VDC
Dielectric Strength	Between coil and contacts	1500VAC, 1min
	Between open contacts	750VAC, 1min
Operate time (at nomi. Volt.)		Max. 10ms
Release time (at nomi. Volt.)		Max. 5ms
Temperature rise (at nomi. Volt.)		Max. 60˚C
Shock Resistance	Functional	98 m/s^2(10g)
	Destructive	980 m/s^2(100g)
Vibration Resistance		1.5mm, 10 to 55Hz
Humidity		35% to 85%RH
Ambient temperature		-40˚C to +85˚C
Termination		PCB
Unit weight		Approx. 10g
Construction		Sealed IP67 & Flux proof

COIL

Coil power	0.36W*48VDC : 0.51W*

COIL DATA

Nominal Voltage VDC	Pick-up Voltage VDC	Drop-out Voltage VDC	Max. allowable Voltage VDC(at 25˚C)	Coil Resistance Ω
5	3.80	0.5	6.5	70 ± 10%
6	4.50	0.6	7.8	100 ± 10%
9	6.80	0.9	11.7	225 ± 10%
12	9.00	1.2	15.6	400 ± 10%
18	13.5	1.8	23.4	900 ± 10%
24	18.0	2.4	31.2	1600 ± 10%
48	36.0	4.8	62.4	4500 ± 10%

SAFETY APPROVAL RATINGS

UL	1 Form C	10A 277 VAC 10A 120VAC 1/2 HP 125/250VAC
	1 Form A	10A 277VAC TV-5 120VAC 15A 125VAC 120VAC 125VAC 1/2hp,125VAC
TÜV	1 Form C	8A 250VAC 12A 125VAC cos phi=1 5A 250VAC cos phi=1
	1 Form A	10A 277VAC 12A 125VAC cos phi=1 5A 250VAC cos phi=1

ORDERING INFORMATION

	JQC-3FF	/ 012	1H	S	T	F

Type

Coil voltage 5, 6, 9, 12, 18, 24, 48VDC

Contact arrangement **1H**:1 Form A (SPST-NO) **1Z**:1 Form C (SPDT)

Structure **S**: Sealed IP67 **Nil**: Flux proof

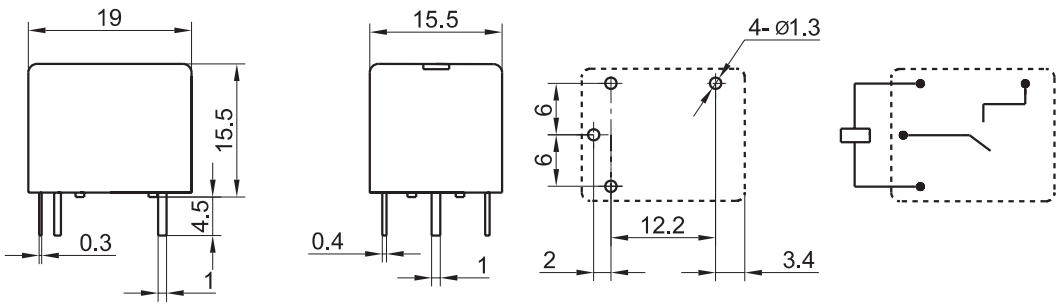
Contact Material **T**: $AgSnO_2$ **Nil**: AgCdo

Insulation System **F**: Class F 155˚C **Nil**: Class B 130˚C

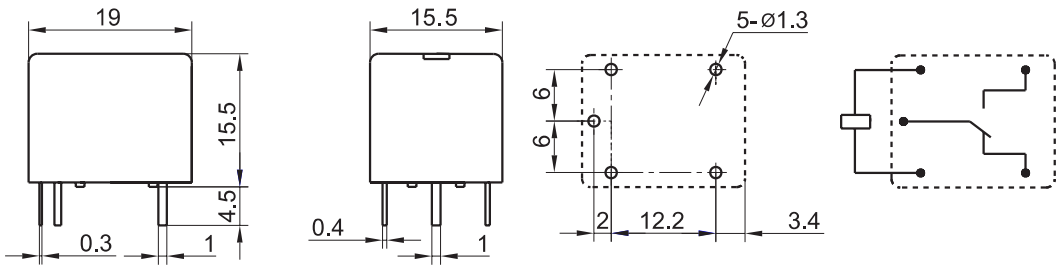
OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT

Outline Dimensions PCB layout Wiring Diagram

1A



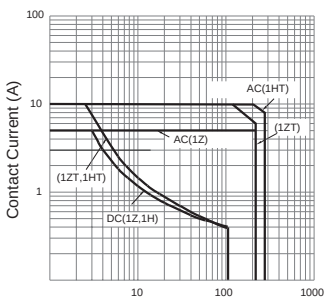
1C



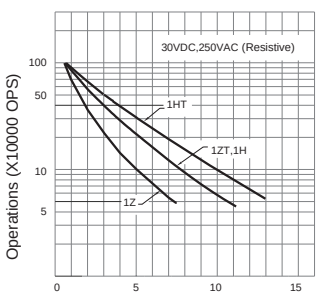
Bottom view Bottom view

CHARACTERISTICS CURVE

MAXIMUM SWITCHING POWER



LIFE CURVE



COIL TEMPERATURE RISE