ET1 SERIES

FEATURES

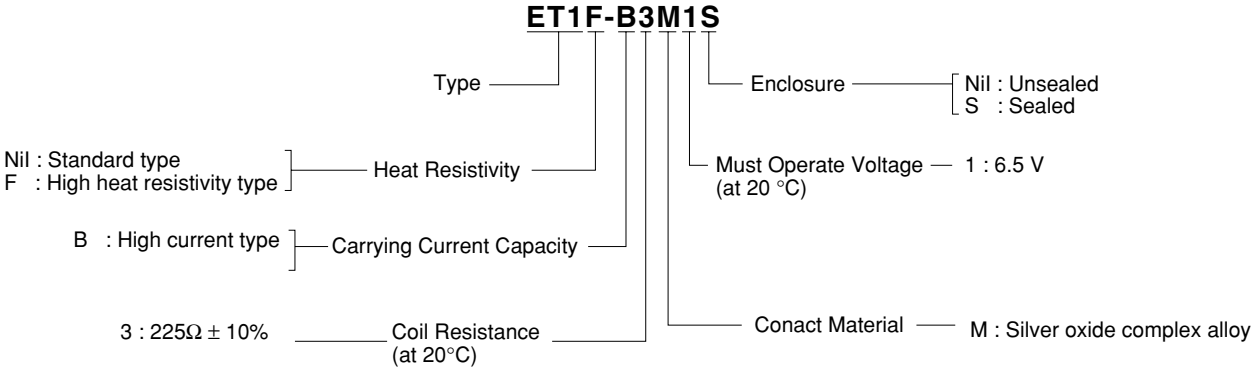
- 50% less relay volume than conventional relay (EP1 Series)
- 75% less relay space than conventional relay (EP1 Series)
- 70% less relay height than conventional relay (EP1 Sereis)
- 50% less relay weight than conventional relay (EP1 Sereis)
- Contact switching current of 25A max.
- Flux tight housing
- Delivered in stick-tube for automatic insertion machine
- Washable type available

PART NUMBERS AND COIL RATINGS

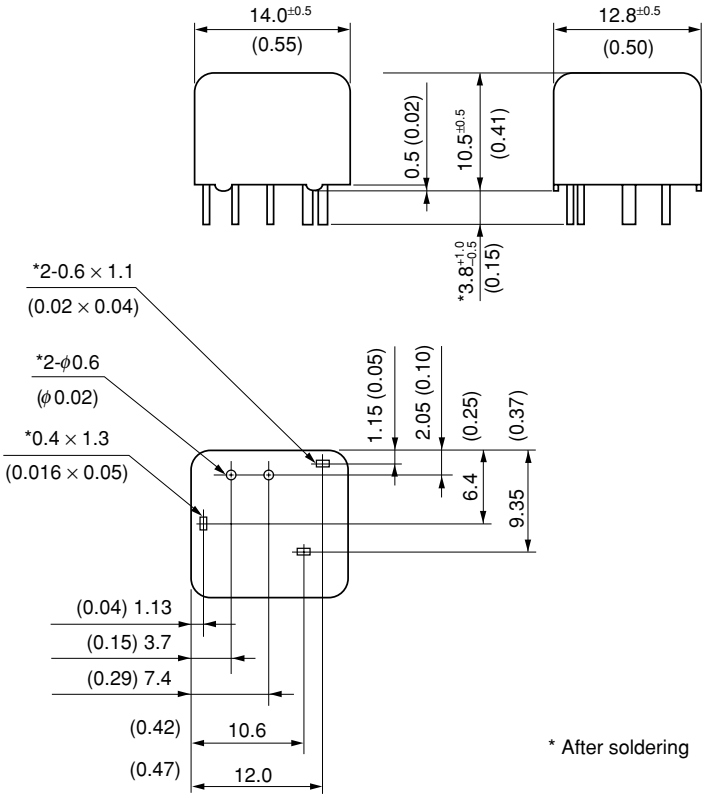
At 20°C (68°F)

Part Number	Nominal Voltage (Vdc)	Coil Resistance (Ω±10%)	Nominal Current (mA)	Must Operate Voltage (Vdc)	Must Release Voltage (Vdc)	Nominal Operate Power (W)
ET1-B3M1S	12	225	53.3	6.5	0.9	0.64

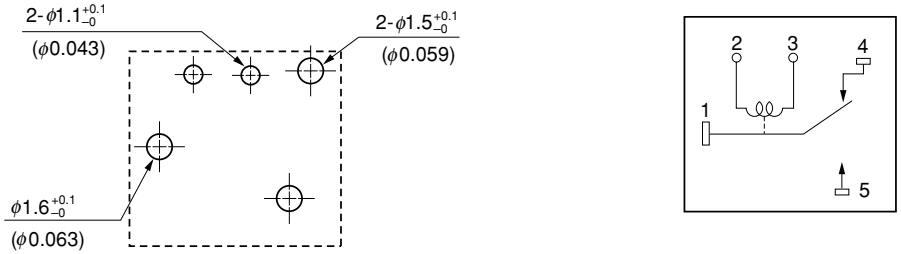
PART NUMBER SYSTEM



DIMENSIONS mm (inch)



PCB PAD LAYOUT and SCHEMATICS (bottom view) mm (inch)



SPECIFICATIONS At 20°C (68°F)

Items		Specification	
		ET1	ET1F
Contact Form		1 form c	
Contact Material		Silver oxide complex alloy	
Contact Resistance		4 mΩ typical (measured at 7 A) initial	
Contact Switching Voltage		16 Vdc max. 5 Vdc min.	
Contact Switching Current		25 A max. (at 16 Vdc)	
Contact Carrying Current		35 A (2 minutes max. 12 Vdc at 20°C) 30 A (2 minutes max. 12 Vdc at 85°C)	40 A (2 minutes max. 12 Vdc at 20°C) 35 A (2 minutes max. 12 Vdc at 85°C) 30 A (2 minutes max. 12 Vdc at 125°C)
Operate Time		2.5 ms typical (at nominal voltage) initial	
Release Time		3.0 ms typical (at nominal voltage. with diode) initial	
Nominal Operate Power		640 mW	
Insulation Resistance		100 MΩ min. at 500 Vdc	
Breakdown Voltage		500 Vac min. for 1 minute	
Shock Resistance		98 m/s^2 min. [misoperating]	
Vibration Resistance		10 to 300 Hz, 43 m/s^2 min. [misoperating]	
Ambient Temperature		–40°C to +85°C (–40°F to +185°F)	–40°C to +125°C (–40°F to +257°F)
Coil Temperature Rise		70°C/W (contact carrying current 0 A)	
Life Expectancy	Mechanical	1×10^6 operations	
	Electrical	1×10^5 operations (at 14 Vdc, Motor Load 20 A/3 A)	
Weight		Approx. 7.5 g	

Mouser Electronics

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NEC:
ET1-B3M1S