

C Series Reed Relays

High Density Surface Mount

The C Series reed relay is a compact, high-density, low-profile surface mount relay. It offers the same reliability and assembly capabilities as the M Series but in a smaller package. The C Series features a 1 Form A configuration with excellent shielding and impressive 5GHz RF performance.

Compared to the M Series, it achieves a 10% size reduction while maintaining the same high reliability. The C Series is known for its long product life and is widely used in ATE, telecommunications, and wireless communications markets.



		CJ-E103	CJ-E105	Standard = 5 GHz RF = 7 GHz
		CJ-E103RF	CJ-E105RF	
Parameters	Units	1 Form A		Test Conditions
Coil Specifications				
Nominal Coil Voltage	VDC	3.3	5.0	±10% @ 20°C @ 20°C @ 20°C
Coil Resistance	Ω	100	200	
Operate Voltage	VDC Max	2.8	3.75	
Release Voltage	VDC Min	0.5	0.7	
Contact Ratings				
Switching Voltage	Volts	100		Max DC/Peak AC resistance
Switching Current	Amps	0.5		Max DC/Peak AC resistance
Carry Current	Amps	1.0		Max DC/Peak AC resistance(@30°C)
Contact Rating	Watts	10		Max DC/Peak AC resistance
Life Expectancy	x10 ⁶ Cycle	300		@ 1V 10mA
Contact Resistance	mΩ	150		Max initial @ operate voltage
Contact Resistance Stability	mΩ	5.0		Max initial @ operate voltage
Relay Specifications				
Insulation Resistance	Ω Min	10 ¹¹		Between all isolated pins @ 100V 20°C 65%RH
Dielectric Strength (Static)	VDC Min	200		Between contacts
	VDC Min	250		Contacts to shield
	VDC Min	250		Contacts to coil
	VDC Min	250		Shield to coil
Operate Time (Including Bounce)	msec Max	0.3		@ nominal coil voltage
Release Time	msec Max	0.05		100 Hz square wave Diode suppression
Measurement Reference Conditions		Environmental Ratings		
Temp: 15°C to 35°C Humidity: 25% to 75%RH Atmospheric Pressure: 860 to 1060hpa		Storage temp: -40°C to +85°C Operate temp: -20°C to +80°C Vibration: 20G's to 2000Hz Shock: 50G's Processing temp: 260°C max for 60sec. dwell time		

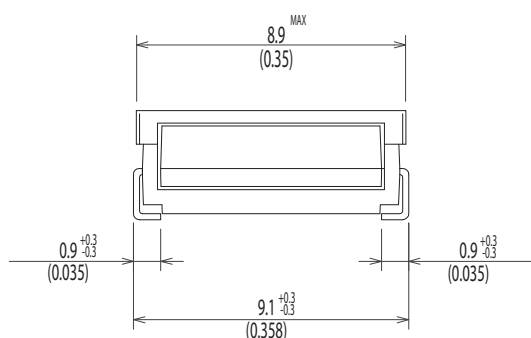
RoHS

C Series Reed Relays

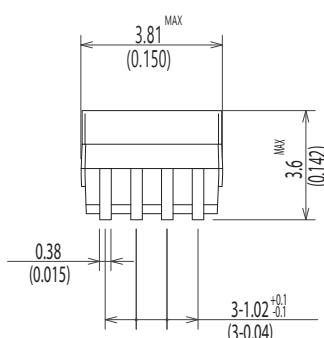


Dimensions All Dimensions are mm (inch)

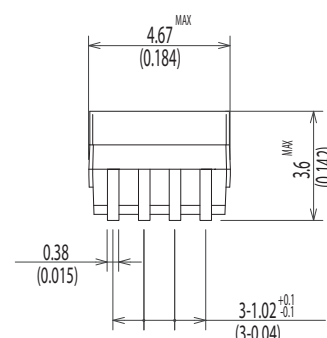
CJ-E1XX/ CJ-E1XXRF



CJ-E1XX

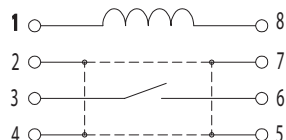


CJ-E1XXRF

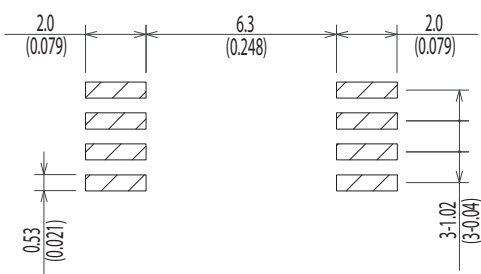


Schematic <Top View>

CJ-I CJ-E103/ CJ-E105



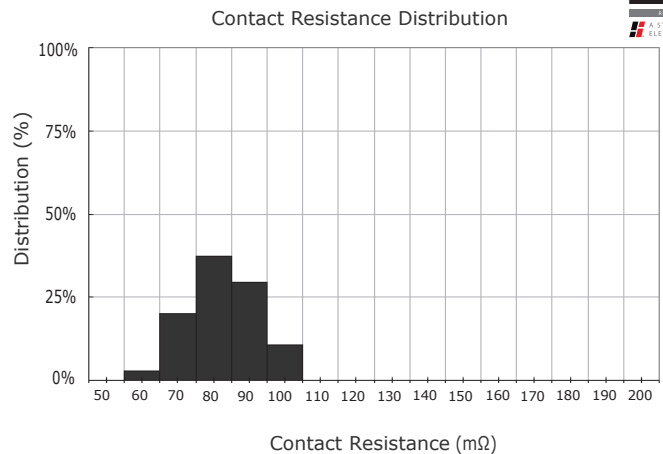
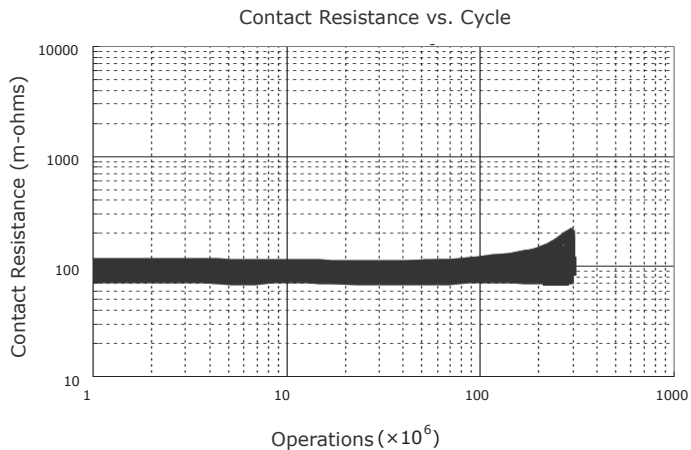
Land Pattern Recommendation



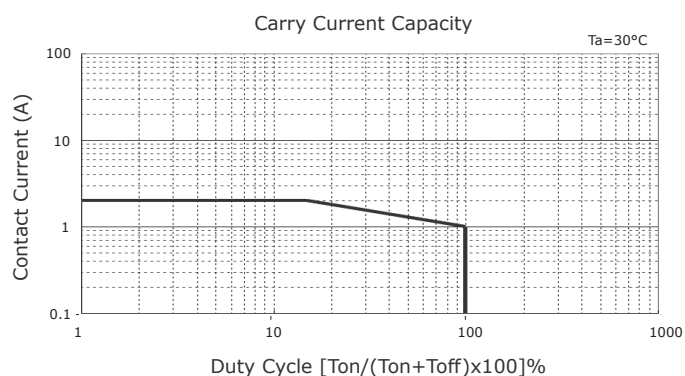
C Series Reed Relays



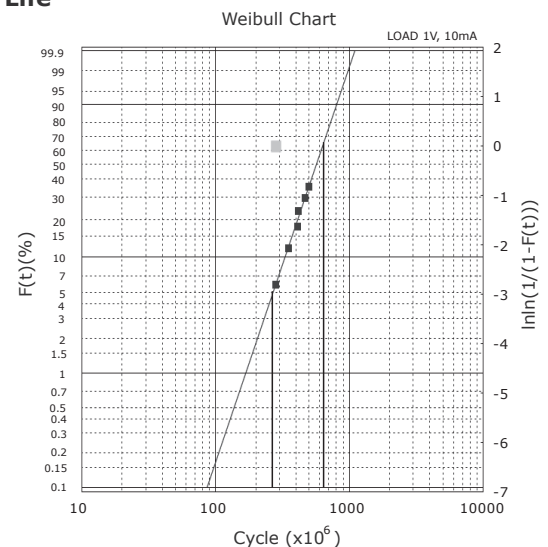
Contact Resistance



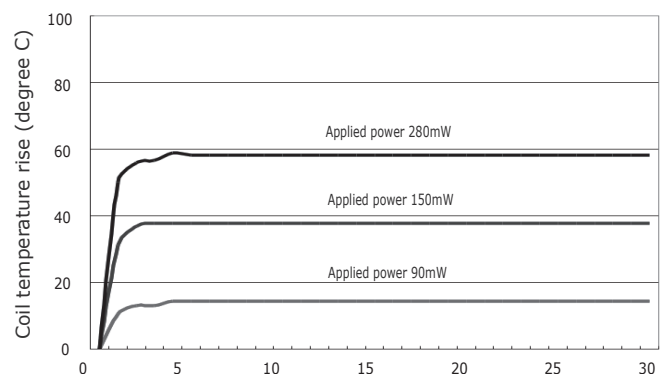
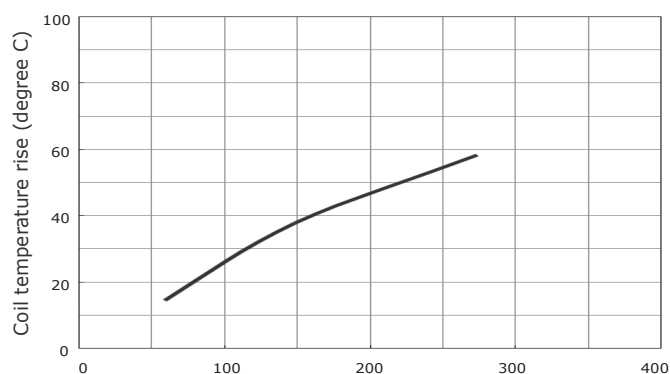
Carry Current



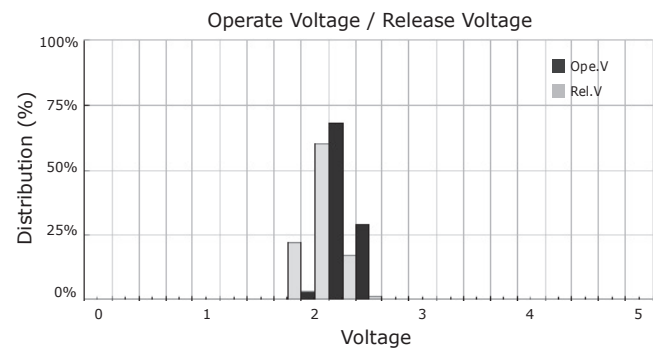
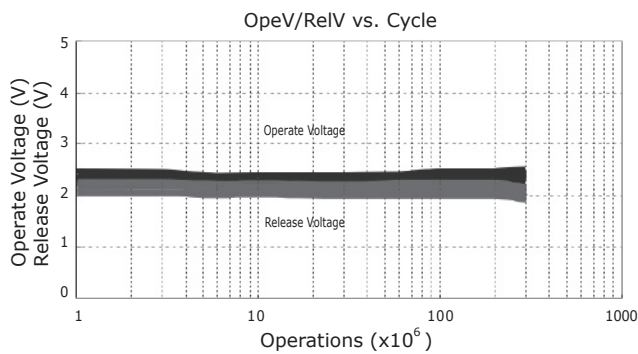
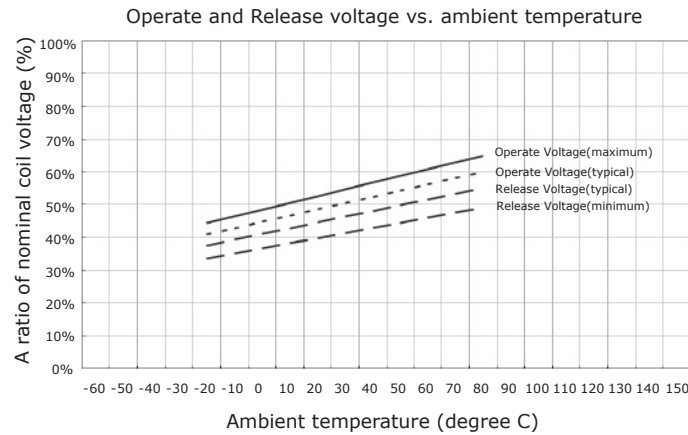
Life



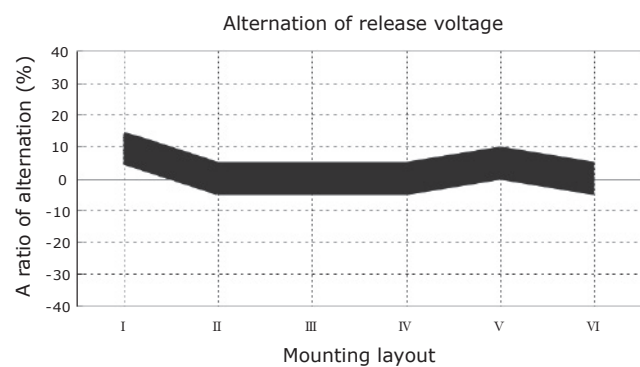
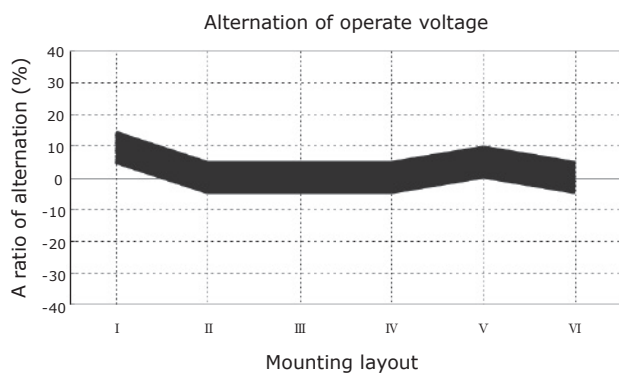
Coil Temperature Rise



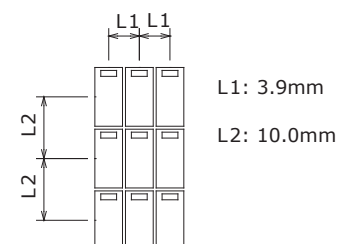
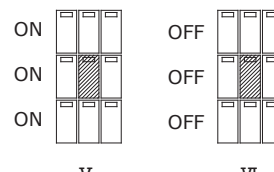
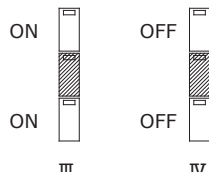
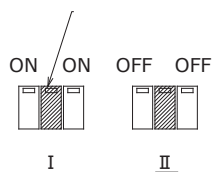
C Series Reed Relays



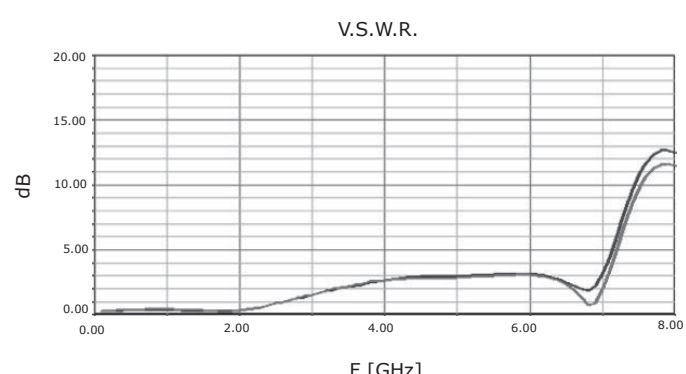
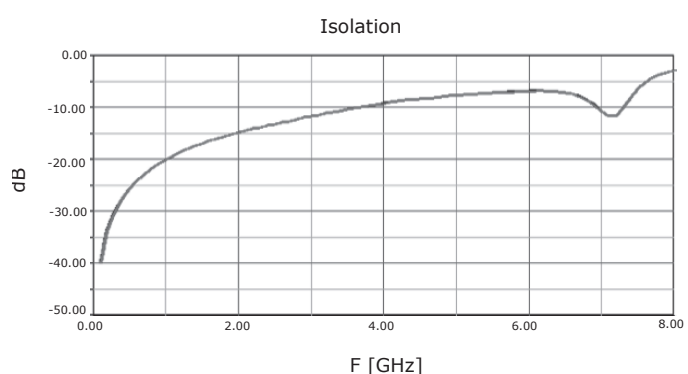
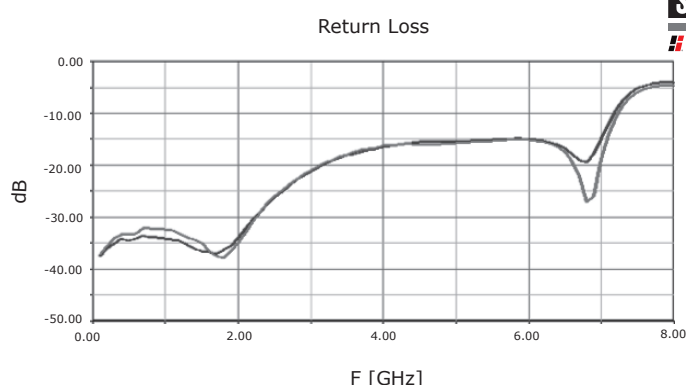
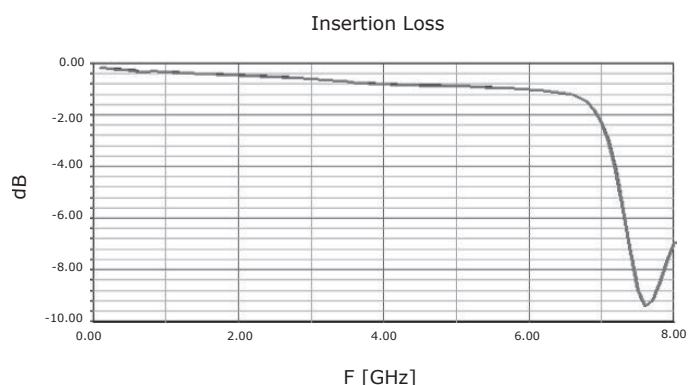
Magnetic Interference



Device under test

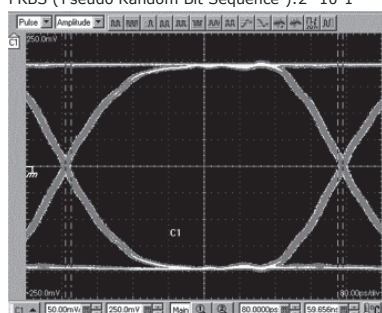


C Series Reed Relays

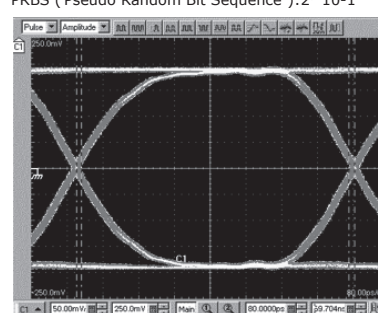


Eye Diagram

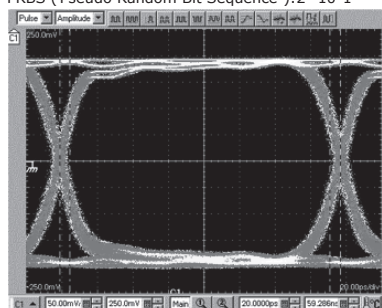
Thru_Fixture
Rise Time: ≈ 250 ps, Bit Rate: 1.6Gb/s
PRBS (Pseudo Random Bit Sequence): $2^{10}-1$



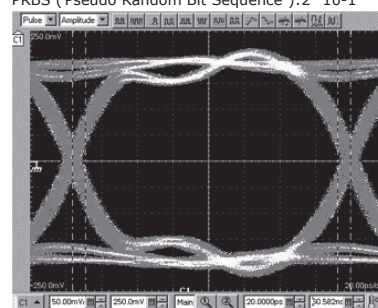
CJ-E105 with Fixture
Rise Time: ≈ 250 ps, Bit Rate: 1.6Gb/s
PRBS (Pseudo Random Bit Sequence): $2^{10}-1$



Thru_Fixture
Rise Time: ≈ 30 ps, Bit Rate: 6.4Gb/s
PRBS (Pseudo Random Bit Sequence): $2^{10}-1$



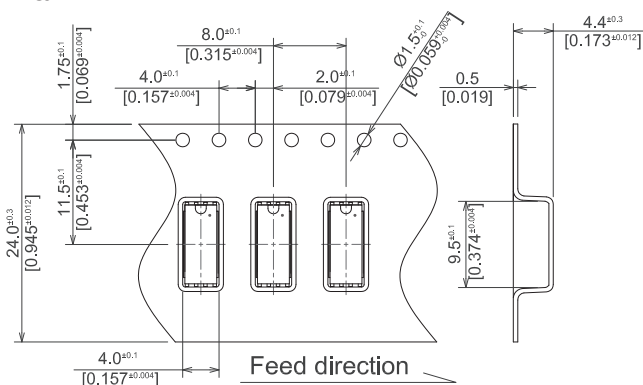
CJ-E105 with Fixture
Rise Time: ≈ 30 ps, Bit Rate: 6.4Gb/s
PRBS (Pseudo Random Bit Sequence): $2^{10}-1$



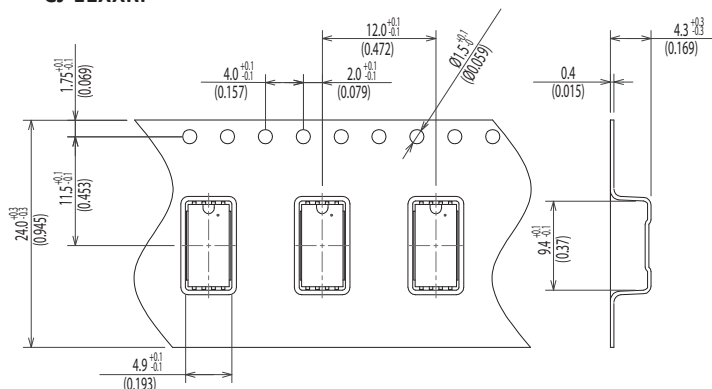
C Series Reed Relays



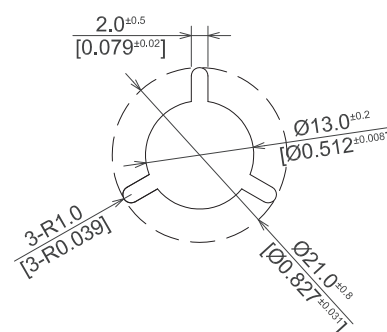
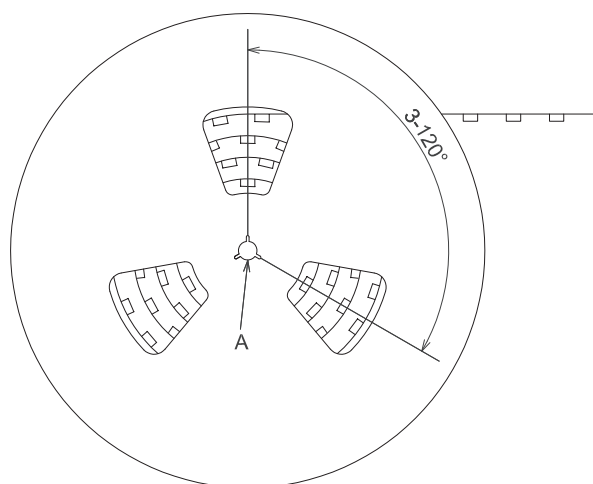
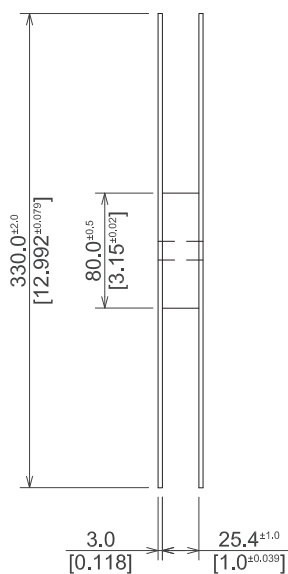
CJ-E1XX



CJ-E1XXRF

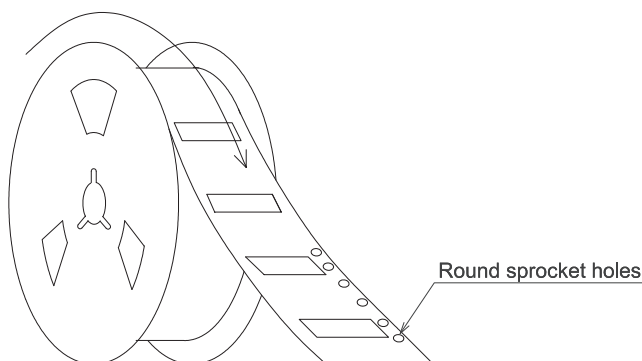


Details of the part A



Packaging Quantity

2,000pcs



All Dimensions are measured in millimeters[inch]

Packing conforms to EIA standard EIA-481-2 or EIA-481-3.