# **1E Series**

# **Miniature Surface Mount**



#### **PRODUCT DESCRIPTIONS**

As a standard for Sanyu SMT relays, the 1E Series has been widely accepted by the ATE, telecommunications, and instrument markets. A variety of package styles such as Axial, Gill-Wing and J-Lead are produced to best suit your application needs.

- -RF Performance up to 4GHz
- -Impedance  $50\Omega$
- -UL Certified

#### **SPECIFICATIONS**

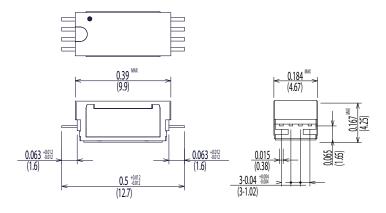


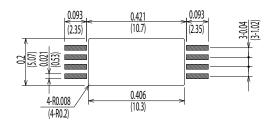
1E Series		1E-54A	1E-14A	1E-24A	
		1E-54G	1E-14G	1E-24G	A: Axial, G: Gull-Wing, J: J-Lead
		1E-54J	1E-14J	1E-24J	
Parameters	Units		1 form A		Test Conditions
Coil Specifications					
Nominal Coil Voltage Coil Resistance Operate Voltage Release Voltage	VDC Ω VDC Max VDC Min	3.3 80 2.15 0.5	5.0 150 3.25 0.7	12.0 500 8.1 1.2	±10% @ 20°C 15°C to 35°C 15°C to 35°C
Contact Ratings					
Switching Voltage Switching Current Carry Current Contact Rating Life Expectancy Contact Resistance Contact Resistance Stability	Volts Amps Amps Watts x10 <sup>6</sup> Cycle mΩ mΩ	100 0.5 1.0 10 300 150 5.0			Max DC/Peak AC resistance Max DC/Peak AC resistance Max DC/Peak AC resistance Max DC/Peak AC resistance @ 1V 10mA Max initial @ operate voltage Max initial @ operate voltage
Relay Specifications					
Insulation Resistance	Ω Min	10 <sup>11</sup>			Between all isolated pins @ 100V 20°C 40%RH
Dielectric Strength  Operate Time	VDC Min VDC Min VDC Min msec Max	200 250 250 0.3		Between contacts Contacts to shield Contacts / Shield to coil @ nominal coil voltage	
(Including Bounce) Release Time	msec Max	0.05			100Hz square wave Diode suppression
<b>Environmental Rating</b>	s				
Measurement Reference Conditions  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			

# **Dimensions** All Dimensions are inches (mm)

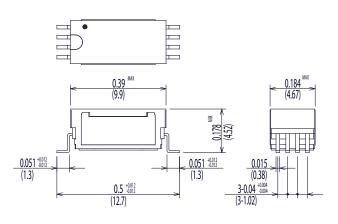
#### **Land Pattern Recommendation**

#### 1E-54A/1E-14A/1E-24A



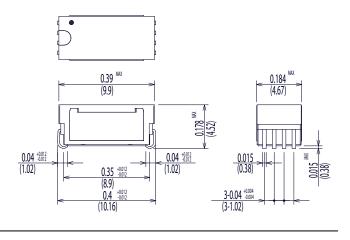


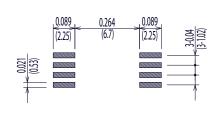
## 1E-54G/1E-14G/1E-24G





#### 1E-54J/1E-14J/1E-24J





## Schematic <Top View>

