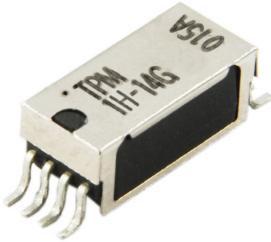# 1H Series   Miniature Surface Mount

PRODUCT DESCRIPTIONS

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

-RF Performance up to 4GHz
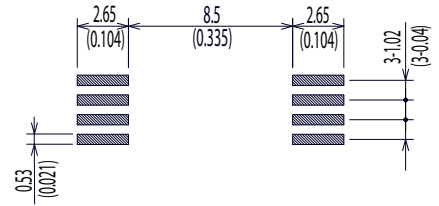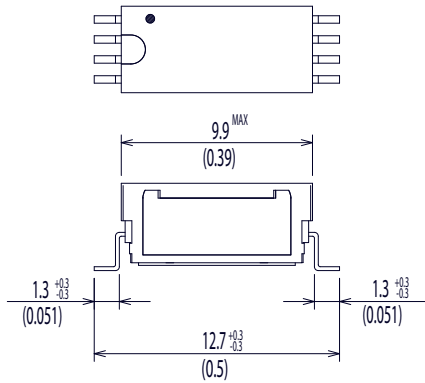-Impedance 50Ω
-UL Certified

SPECIFICATIONS

1H Series		1H-54G	1H-14G	1H-24G	
		1H-54J	1H-14J	1H-24J	
		1H-54A	1H-14A	1H-24A	
Parameters	Units		1 Form A		Test Conditions
Coil Specifications					
Nominal Coil Voltage	VDC	3.3	5.0	12.0	
Coil Resistance	Ω	80	150	500	±10% @ 20˚C
Operate Voltage	VDC Max	2.8	3.75	8.8	@ 20˚C
Release Voltage	VDC Min	0.5	0.7	1.2	@ 20˚C
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^{12}		Between all isolated pins @ 100V 20˚C 65%RH
Dielectric Strength (Static)	VDC Min		200		Between contacts
	VDC Min		1500		Contacts to shield
	VDC Min		1500		Contacts/Shield to coil
Operate Time (Including Bounce)	msec Max		0.3		@ nominal coil voltage 100 Hz square wave
Release Time	msec Max		0.05		Diode suppression

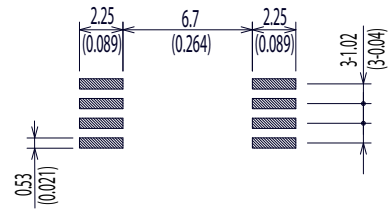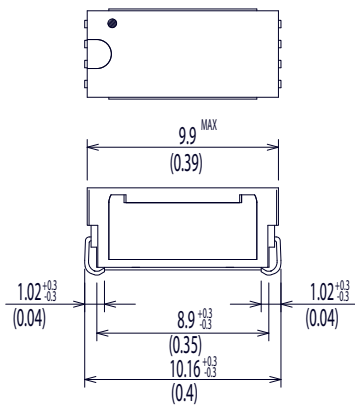| Measurement Reference Conditions	Environmental Ratings
Temp: 15˚C to 35˚C Humidity: 25% to 75%RH Atmospheric Pressure: 860 to 1060hpa	Storage temp: -40˚C to +85˚C Operate temp: -20˚C to +80˚C Vibration: 20G's to 2000Hz Shock: 50G's Processing temp: 260˚C max for 60sec. dwell time

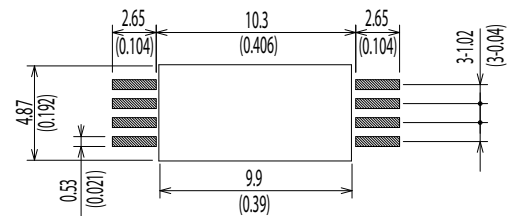## Dimensions   All Dimensions are mm (inch)
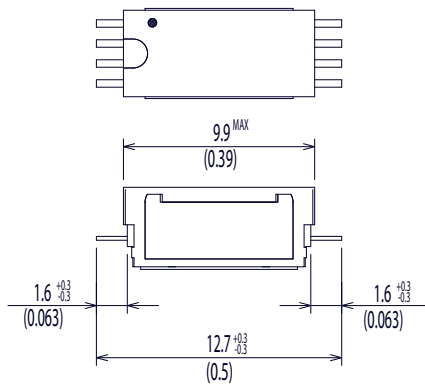
Land Pattern Recommendation

1H-54G/1H-14G/1H-24G

9.9 MAX
(0.39)

4.67 MAX
(0.184)

4.52 MAX
(0.178)

1.3 +0.3 -0.3
(0.051)

1.3 +0.3 -0.3
(0.051)

12.7 +0.3 -0.3
(0.5)

0.38
(0.015)

3-1.02 +0.1 -0.1
(3-0.04)

2.65
(0.104)

8.5
(0.335)

2.65
(0.104)

3-1.02
(3-0.04)

0.53
(0.021)

1H-54J/1H-14J/1H-24J

9.9 MAX
(0.39)

4.67 MAX
(0.184)

4.52 MAX
(0.178)

1.02 +0.3 -0.3
(0.04)

8.9 +0.3 -0.3
(0.35)

1.02 +0.3 -0.3
(0.04)

10.16 +0.3 -0.3
(0.4)

0.38
(0.015)

3-1.02 +0.1 -0.1
(3-0.04)

2.25
(0.089)

6.7
(0.264)

2.25
(0.089)

3-1.02
(3-0.04)

0.53
(0.021)

1H-54A/1H-14A/1H-24A

9.9 MAX
(0.39)

4.67 MAX
(0.184)

4.25 MAX
(0.167)

1.6 +0.3 -0.3
(0.063)

1.6 +0.3 -0.3
(0.063)

12.7 +0.3 -0.3
(0.5)

0.38
(0.015)

1.65
(0.065)

3-1.02 +0.1 -0.1
(3-0.04)

2.65
(0.104)

10.3
(0.406)

2.65
(0.104)

3-1.02
(3-0.04)

4.87
(0.192)

0.53
(0.021)

9.9
(0.39)

Schematic <Top View>

1 ——⟋⟋⟋—— 8
2 ——— 7
3 ——— 6
4 ——— 5