

1N400XW SERIES

SURFACE MOUNT GENERAL PURPOSE RECTIFIERS

产

品

规

格

确

认

书

1N4001W THRU 1N4007W



康比電子
HORNBY ELECTRONIC

SURFACE MOUNT GENERAL PURPOSE RECTIFIERS

REVERSE VOLTAGE: 50 to 1000 VOLTS

FORWARD CURRENT: 1.0 AMPERE

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- For surface mounted applications
- Low profile package
- Easy pick and place
- Built-in strain relief
- Low forward voltage drop
- High temperature soldering : 250°C /10 seconds at terminals

MECHANICAL DATA

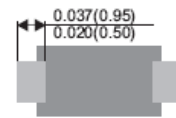
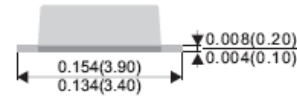
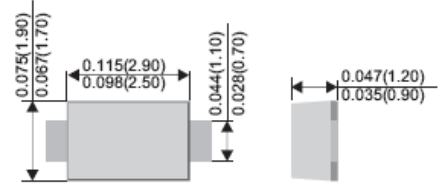
Case: Molded plastic, SOD-123FL

Terminals: Solder plated, solderable per MIL-STD-750, method 2026 guaranteed

Polarity: Color band denotes cathode end

Packaging: 12mm tape per EIA STD RS-481

SOD-123FL



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

	Symbols	1N4001W	1N4002W	1N4003W	1N4004W	1N4005W	1N4006W	1N4007W	Units
Marking Code		A1	A2	A3	A4	A5	A6	A7	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current	$I_{(AV)}$	1.0							Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	25							Amp
Maximum Forward Voltage at 1.0A	V_F	1.1							Volts
Maximum Reverse Current at $T_A=25^\circ\text{C}$	I_R	5.0							μAmp
at Rated DC Blocking Voltage $T_A=125^\circ\text{C}$		100							
Typical Junction Capacitance (Note 1)	C_J	4							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	65							$^\circ\text{C/W}$
Operating Junction Temperature Range	T_J	-55 to +150							$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55 to +150							$^\circ\text{C}$

NOTES:

1- Measured at 1 MHz and applied reverse voltage of 4.0 VDC.

2- Thermal resistance from junction to ambient mounted on P.C.B. with 8.0 x 8.0mm copper pad areas

1N4001W THRU 1N4007W

SURFACE MOUNT GENERAL PURPOSE RECTIFIERS



RATINGS AND CHARACTERISTIC CURVES

Fig.1 FORWARD CURRENT DERATING CURVE

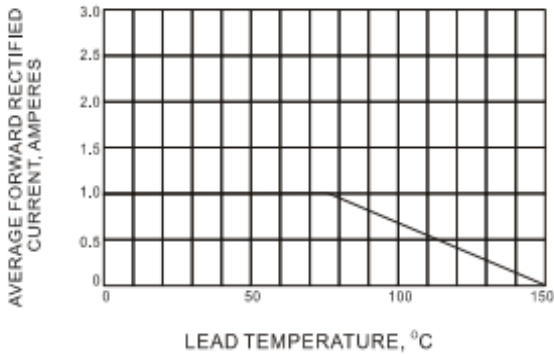


Fig.2 TYPICAL JUNCTION CAPACITANCE

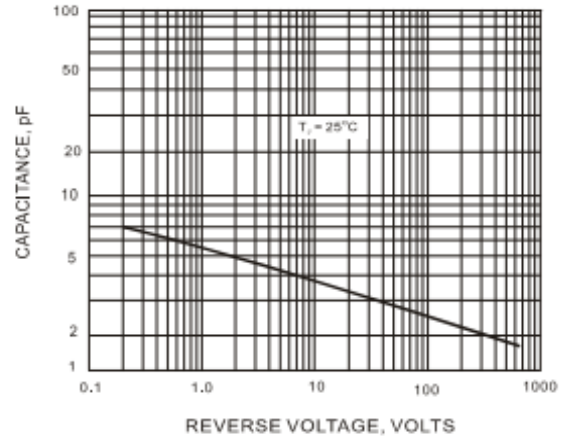


Fig.3 TYPICAL REVERSE CHARACTERISTICS

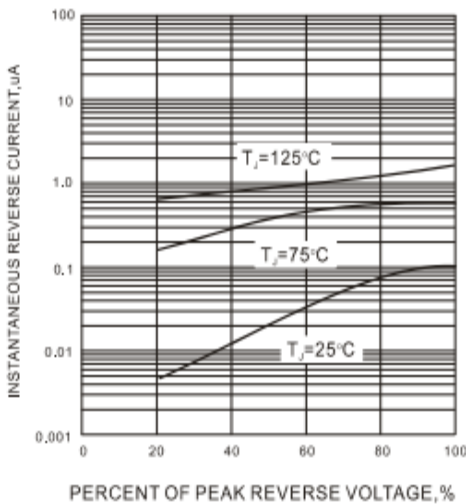


Fig.4 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

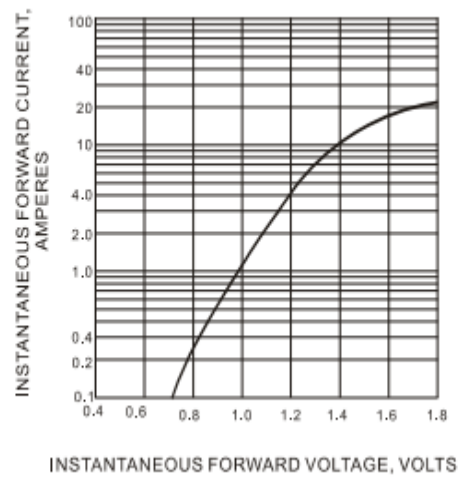


Fig.5- MAXIMUM NON - REPETITIVE SURGE CURRENT

