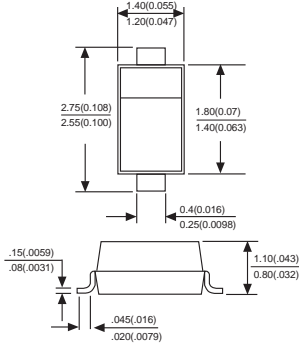




1N4007WS

SURFACE MOUNT GENERAL RECTIFIER
 Reverse Voltage - 600 Volts Forward Current - 1.0 Amperes

SOD-323



FEATURES

- ◆ For surface mounted applications
- ◆ Low profile package
- ◆ Glass Passivated Chip Junction
- ◆ Easy to pick and place
- ◆ Lead free in comply with EU RoHS 2011/65/EU directives

MECHANICAL DATA

Case SOD-323
Terminals Plated leads solderable per MIL-STD-750, Method 2026
Weight: 5.48mg / 0.00019oz

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 current derate by 20%.

MDD Catalog Number	SYMBOLS	1N4007WS	UNITS
Marking code		MDD D7	
Maximum repetitive peak reverse voltage	V_{RRM}	600	VOLTS
Maximum RMS voltage	V_{RMS}	420	VOLTS
Maximum DC blocking voltage	V_{DC}	600	VOLTS
Maximum average forward rectified current at $T_C=125^\circ\text{C}$	$I_{(AV)}$	1.0	Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	7.5	Amps
Maximum instantaneous forward voltage at 1.0A	V_F	1.1	Volts
Maximum DC reverse current at rated DC blocking voltage $T_A=25^\circ\text{C}$ $T_A=100^\circ\text{C}$	I_R	5.0 50.0	μA
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	357	$^\circ\text{C}/\text{W}$
Operating junction and storage temperature range	T_J, T_{STG}	-50 to +150	$^\circ\text{C}$

- (1) Measured at 1 MHz and applied reverse voltage of 4 V D.C
 (2) P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas.



RATINGS AND CHARACTERISTIC CURVES 1N4007WS

Fig.1 Forward Current Derating Curve

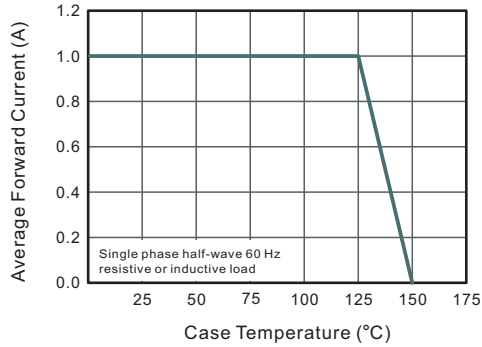


Fig.2 Typical Instantaneous Reverse Characteristics

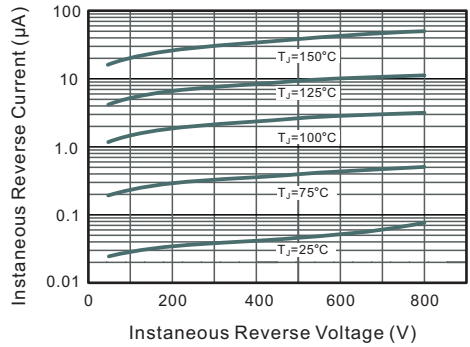


Fig.3 Typical Forward Characteristic

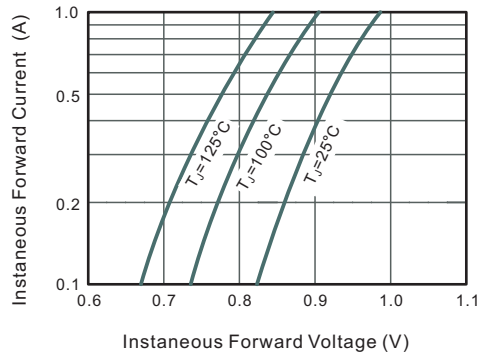


Fig.4 Typical Junction Capacitance

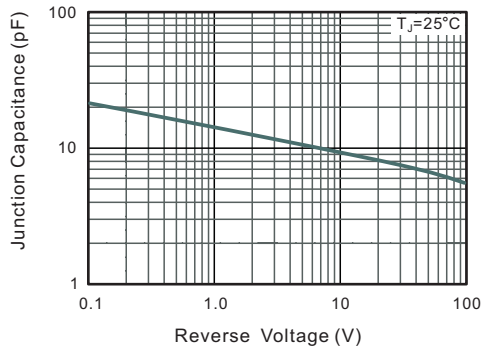
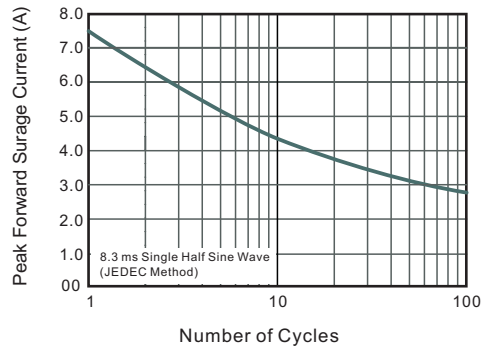


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



The cruve graph is for reference only, can't be the basis for judgment(曲线图仅供参考)!

