



Features

- Average Forward Current: $I_{F(AV)}=1A$
- Polarity: Color band denotes cathode



SMAF

Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
1N4007	SMAF	M7F	10000



Maxmim Ratings (Ta=25 unless otherwise noted)

Item	Symbol	Unit	Test Conditions	1N4007
Repetitive Peak Reverse Voltage	V_{RRM}	V		1000
Maximum RMS Voltage	V_{RMS}	V		700
Average Forward Current	$I_{F(AV)}$	A	60Hz Half-sine wave, Resistance load, $T_L=75^\circ C$	1.0
Surge(Non-repetitive)Forward Current	I_{FSM}	A	60Hz Half-sine wave, 1 cycle, $T_a=25^\circ C$	30
Operation Junction and Storage Temperature Range	T_J, T_{STG}	$^\circ C$		-55 ~ +150

Electrcal Characteristics (Ta=25 unless otherwise specified)

Item	Symbol	Unit	Test Condition	1N4007	
Peak Forward Voltage	V_F	V	$I_F=1.0A$	1.0	
Peak Reverse Current	I_{RRM1}	μA	$V_{RM}=V_{RRM}$	$T_a=25^\circ C$	5
	I_{RRM2}			$T_a=125^\circ C$	50
Thermal Resistance(Typical)	$R_{\theta J-A}$	$^\circ C/W$	Between junction and ambient	55	
	$R_{\theta J-L}$		Between junction and terminal	25	

Notes:

Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.2" x 0.2" (5.0 mm x 5.0 mm) copper pad areas



Typical Characteristics

FIG.1-TYPICAL FORWARD

CHARACTERISTICS

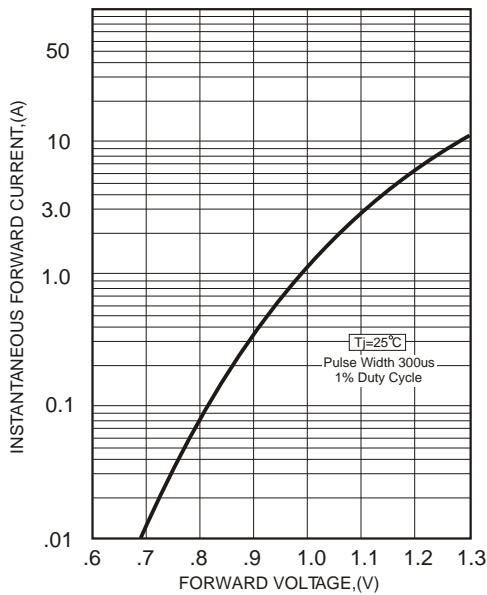


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

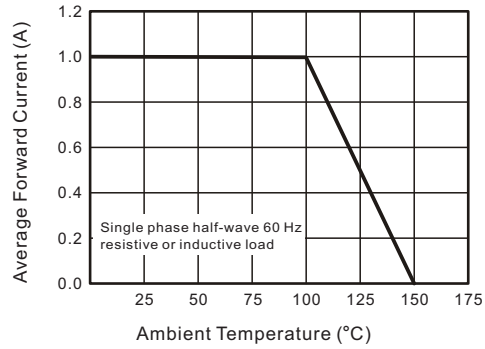


FIG.3 - TYPICAL REVERSE

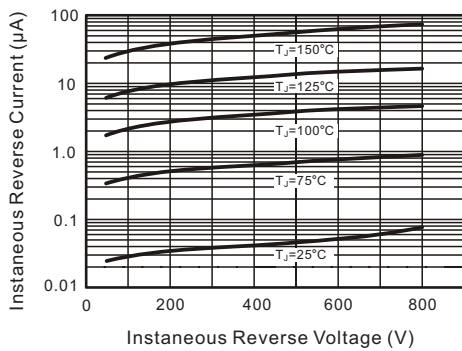


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

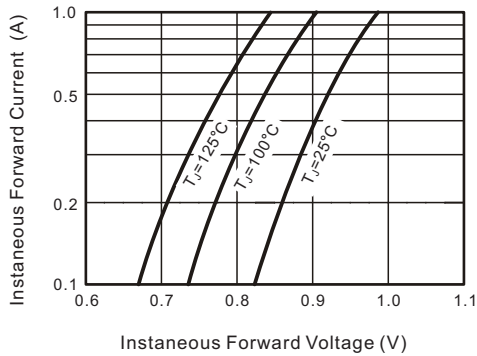
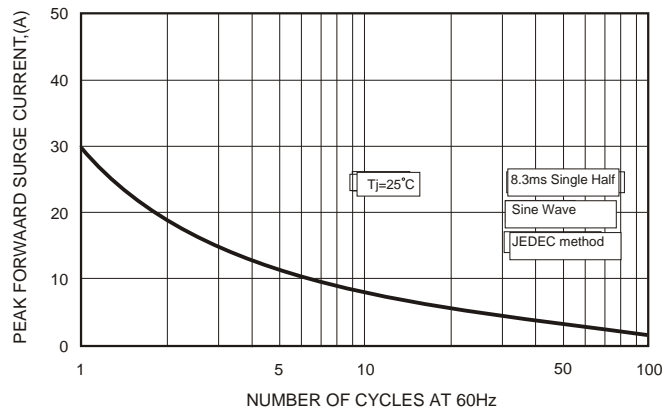
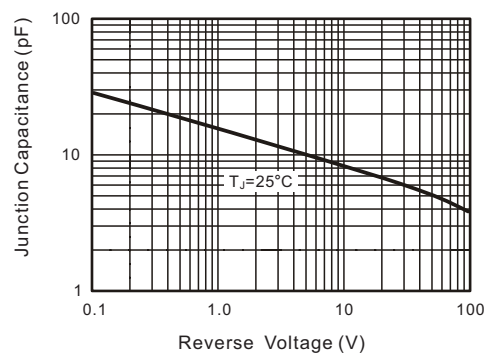
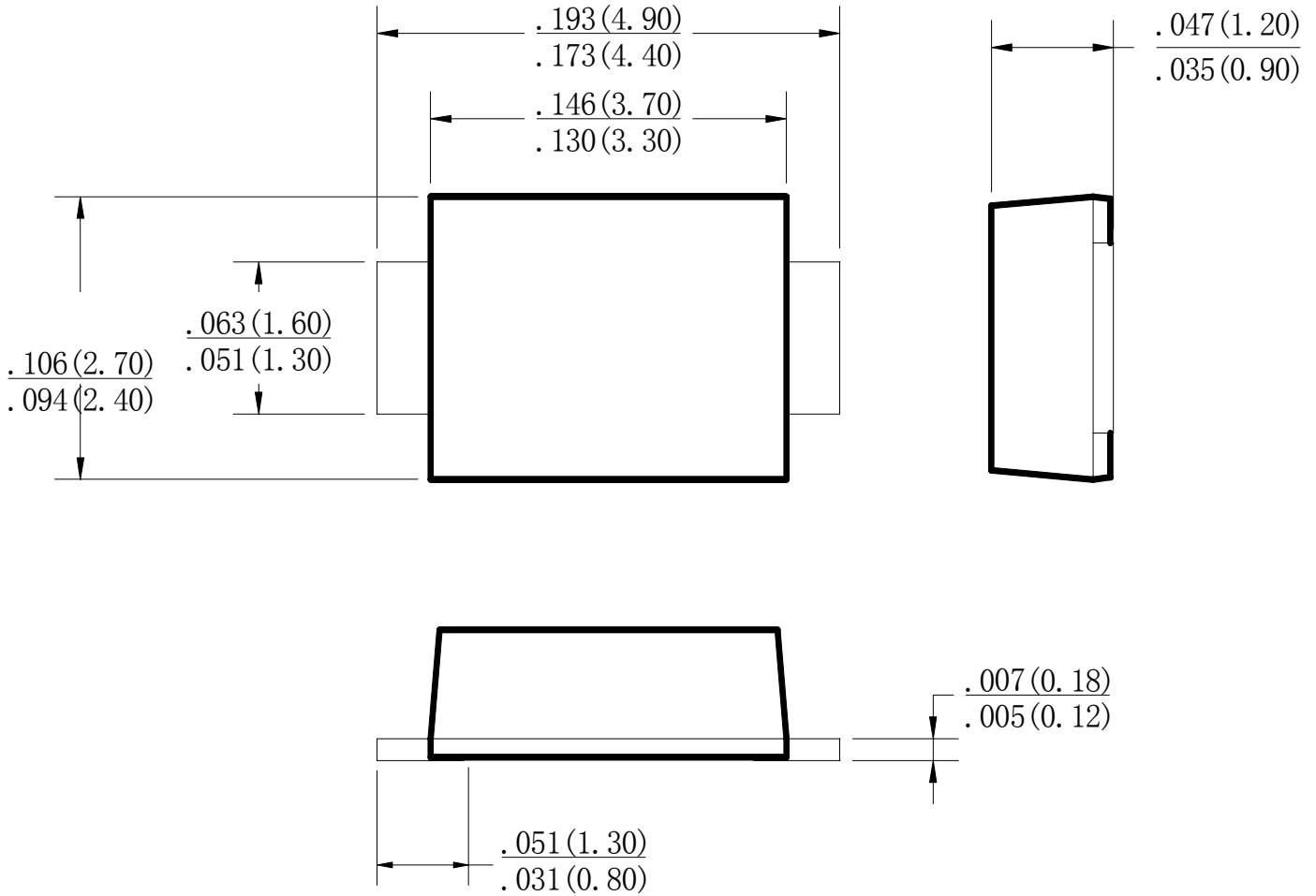


FIG.5-TYPICAL JUNCTION CAPACITANCE





Package Outline Dimensions
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Dimensions in inches and (millimeters)



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