



### FEATURES

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



SOD-123F



### Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
S1A-S1M	SOD-123F	S1★	3000

★:From A-M

### MAXIMUM RATINGS (Ta=25 unless otherwise noted)

Item	Symbol	Unit	Test Conditions	S1						
				A	B	D	G	J	K	M
Repetitive Peak Reverse Voltage	$V_{RRM}$	V		50	100	200	400	600	800	1000
Maximum RMS Voltage	$V_{RMS}$	V		35	70	140	280	420	560	700
Average Forward Current	$I_{F(AV)}$	A	60Hz Half-sine wave, Resistance load, $T_L=100^\circ C$	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						

### ELECTRICAL CHARACTERISTICS (Ta=25 unless otherwise specified)

Item	Symbol	Unit	Test Condition	S1						
				A	B	D	G	J	K	M
Peak Forward Voltage	$V_F$	V	$I_F=2.0A$	1.1						
Peak Reverse Current	$I_{RRM1}$	$\mu A$	$V_{RM}=V_{RRM}$	$T_a=25^\circ C$						
	$I_{RRM2}$			$T_a=125^\circ C$						
Thermal Resistance(Typical)	$R_{\theta J-A}$	$^\circ C/W$	Between junction and ambient	80						
	$R_{\theta J-L}$		Between junction and terminal	16						

#### Notes:

Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.27" x 0.27" (7.0 mm x 7.0 mm) copper pad areas



### Typical Characteristics

FIG.1-TYPICAL FORWARD CHARACTERISTICS

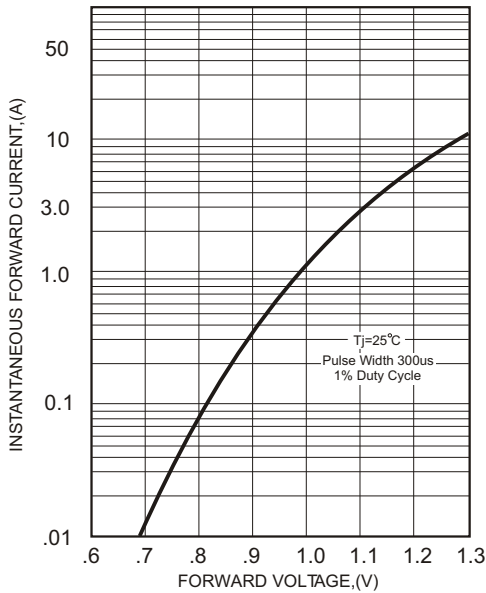


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

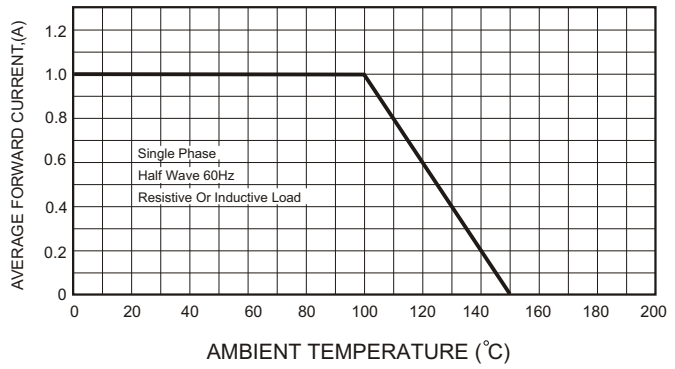


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

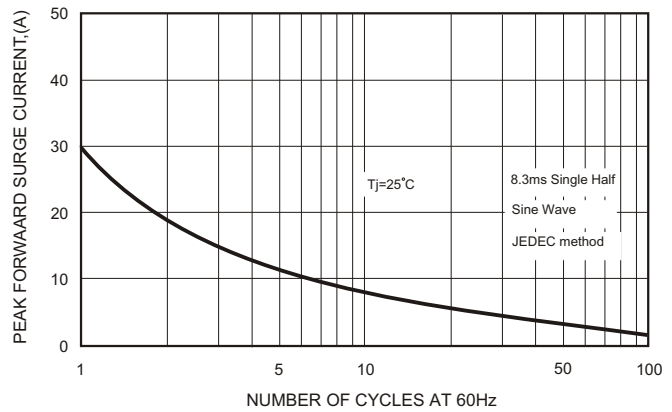


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

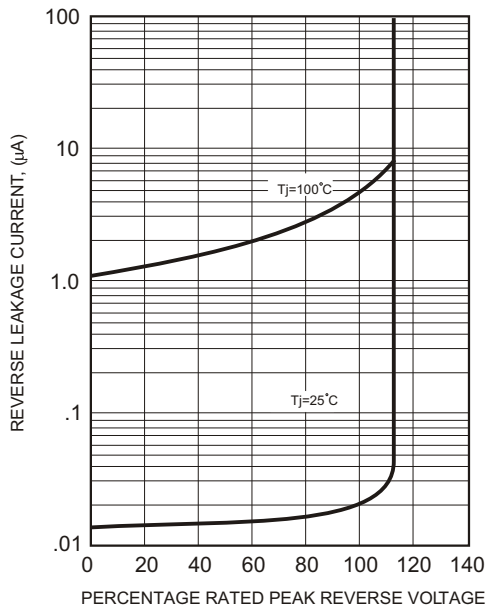
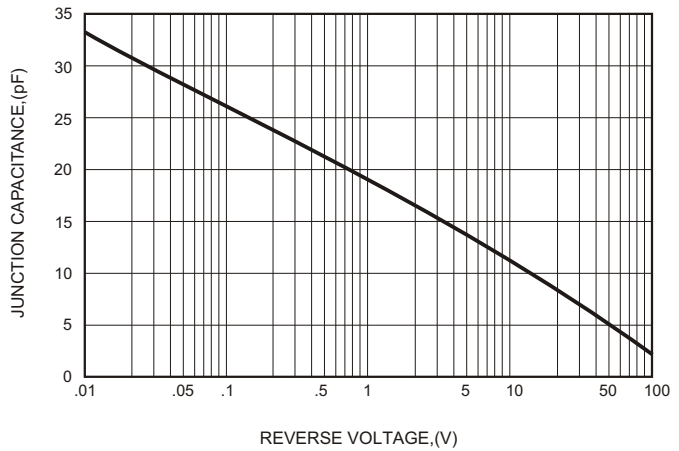
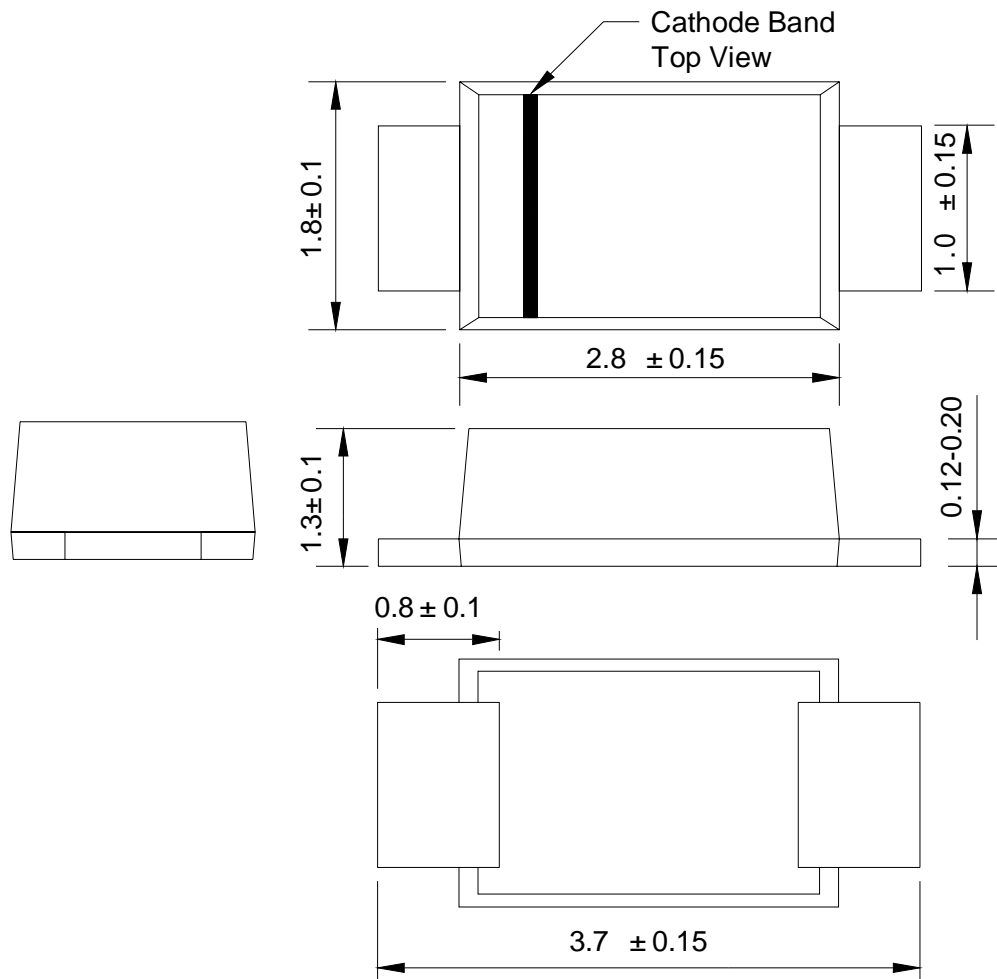


FIG.5-TYPICAL JUNCTION CAPACITANCE





### SOD-123F Package Outline Dimensions





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