

<b>SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS</b>	<b>REVERSE VOLTAGE - 20 to 100 Volts FORWARD CURRENT - 3.0 Amps</b>
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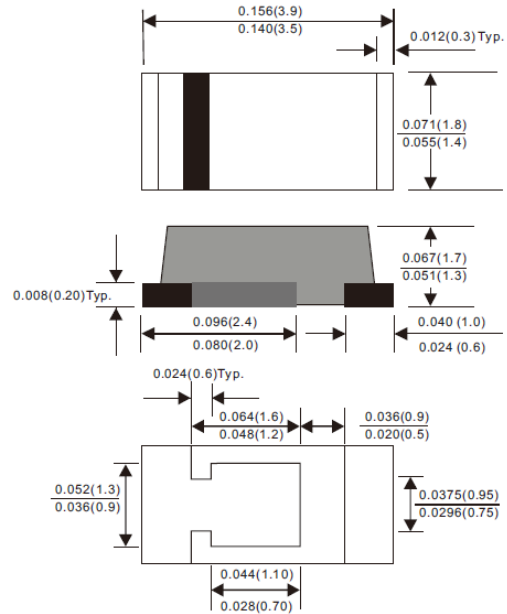
### FEATURES

- Low profile package in order to optimize board space
- Low power losses, high efficiency
- High current & High surge capability
- Low forward voltage drop
- Ultra high speed switching
- Lead-free plating
- Halogen-free with suffix (-H)

### MECHANIAL DATA

- Case : Molded plastic, SOD-123T / Mini SMA
- Terminals : Solder plated, solderable per  
MIL-STD-750, Method 2026
- Polarity : Laser band denotes cathode end
- Weight : 0.018 gram

### SOD-123T



Dimensions in inches (millimeters)

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient tempertaure unless otherwise specified.  
 Single phase, half wave, 60HZ, resistive or inductive load.  
 For capacitive load, derate current by 20%

CHARATERISTICS	SYMBOL	SS32T	SS33T	SS34T	SS35T	SS36T	SS38T	SS310T	UNIT
	MARKING	32	33	34	35	36	38	310	
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	20	30	40	50	60	80	100	V
Maximum RMS Voltage	$V_{RMS}$	14	21	28	35	42	56	70	V
Maximum DC Blocking Voltage	$V_{DC}$	20	30	40	50	60	80	100	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	3.0							A
Peak Forward Surge Current 8.3ms Single Half-Sine-Wave Super Imposed On Rated Load (JEDEC Method)	$I_{FSM}$	50							A
Maximum Forward Voltage at 3.0A DC	$V_F$	0.5			0.70		0.85		V
Maximum DC Reverse Current at Rated DC Blocking Volatge	@ $T_A=25^{\circ}C$	0.2							mA
	@ $T_A=100^{\circ}C$	20							
Thermal Resistance From Junction to Case	$R_{\theta JC}$	30							°C/W
Operating Temperature Range	$T_J$	-50 to +150							°C
Storage Temperature Range	$T_{STG}$	-50 to +175							°C

**COMPANY RESERVES THE RIGHT TO IMPROVE PRODUCT DESIGN,FUNCTIONS AND RELIABILITY WITHOUT NOTICE**

**TYPICAL CHARACTERISTIC CURVES (  $T_J=25^{\circ}\text{C}$ , UNLESS OTHERWISE NOTED )**

FIG.1 - FORWARD CURRENT RERATING CURVE

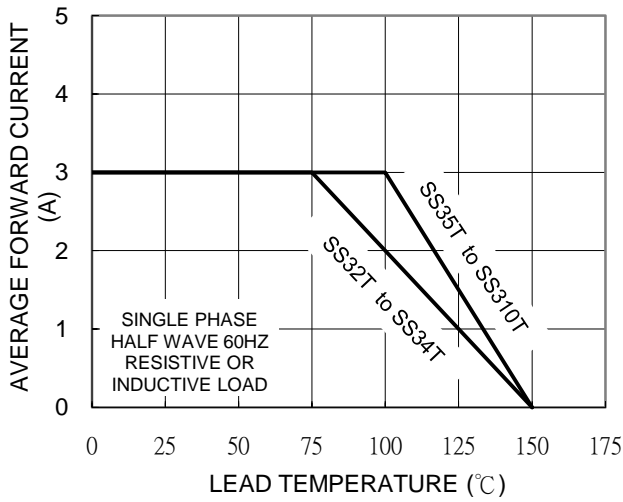


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

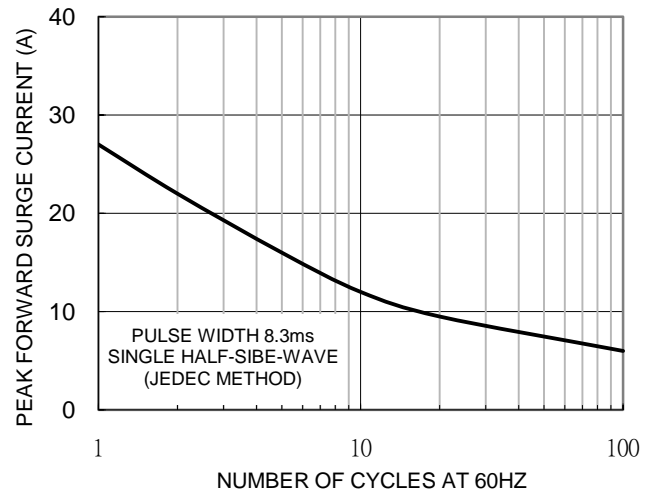


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

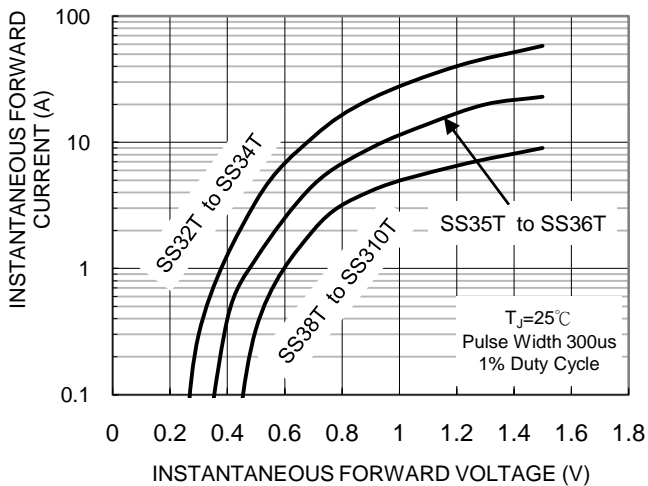
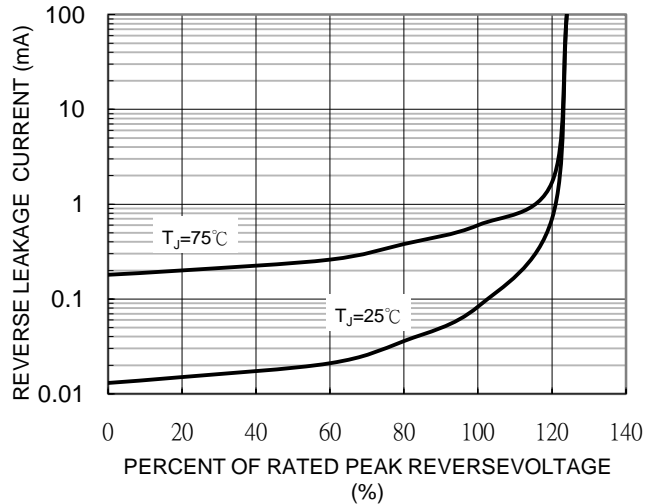
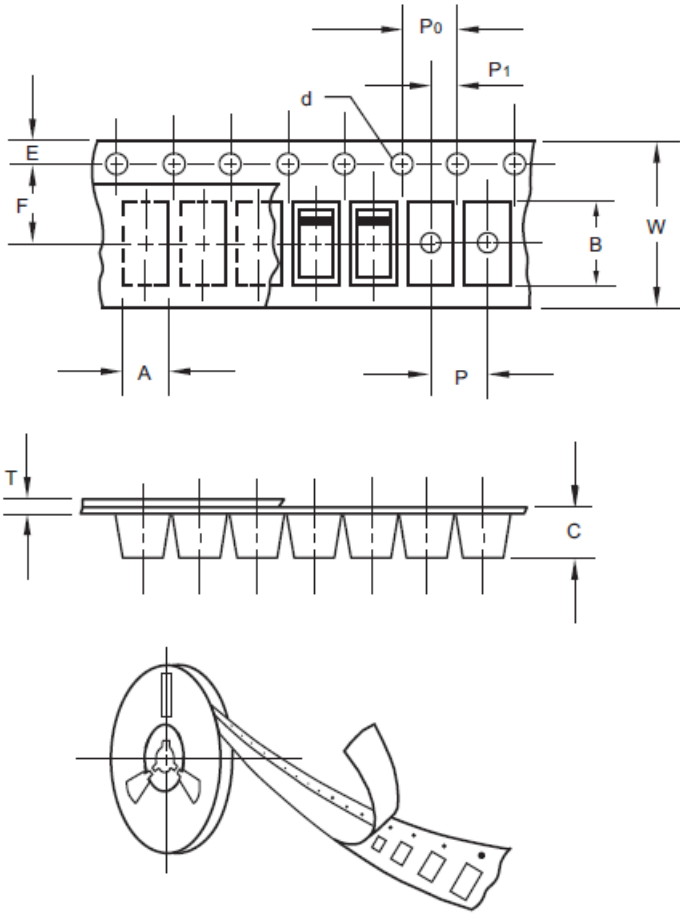


FIG.4 - TYPICAL REVERSE CHARACTERISTICS



**PACKING INFORMATION**

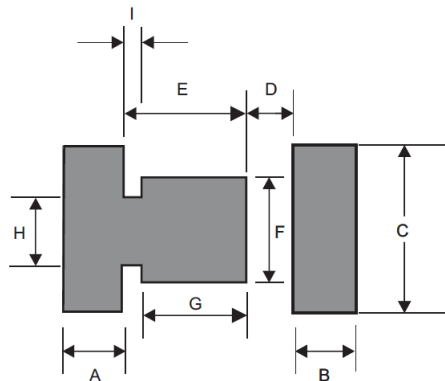


Item	Symbol	Tolerance	SOD-123T
Carrier width	A	0.1	1.90
Carrier length	B	0.1	3.90
Carrier depth	C	0.1	1.68
Sprocket hole	d	0.1	1.50
13" Reel outside diameter	D	2.0	-
13" Reel inner diameter	D <sub>1</sub>	min	-
7" Reel outside diameter	D	2.0	178.00
7" Reel inner diameter	D <sub>1</sub>	min	62.00
Feed hole diameter	D <sub>2</sub>	0.5	13.00
Sprocket hole position	E	0.1	1.75
Punch hole position	F	0.1	3.50
Punch hole pitch	P	0.1	4.00
Sprocket hole pitch	P <sub>0</sub>	0.1	4.00
Embossment center	P <sub>1</sub>	0.1	2.00
Overall tape thickness	T	0.1	0.23
Tape width	W	0.3	8.00
Reel width	W <sub>1</sub>	1.0	11.40

unit:mm

PACKAGE	PEEL SIZE	REEL (pcs)	BOX (pcs)	CARTON (pcs)	REEL DIA. (m/m)	INNER BOX (m/m)	CARTON SIZE (m/m)	GROSS WEIGHT (kg)
SOD-123T	7"	2,500	25,000	200,000	178	183*183*123	382*262*387	9.5

**MOUNTING PAD LAYOUT**



PACKAGE	A	B	C	D	E	F	G	H	I
SOD-123T	0.040 (1.00)	0.040 (1.00)	0.067 (1.70)	0.020 (0.50)	0.060 (1.50)	0.044 (1.10)	0.355 (0.90)	0.0335 (0.85)	0.024 (0.60)

Dimensions in inches ( millimeters )