

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

REVERSE VOLTAGE - 20 to 100 Volts
FORWARD CURRENT - 3.0 Amps

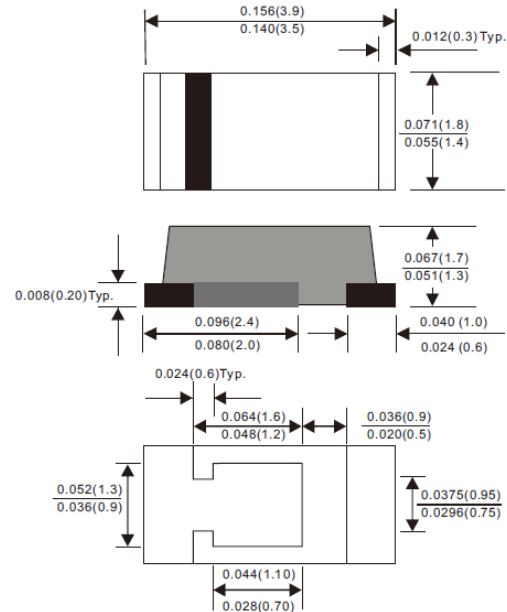
FEATURES

- 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℃	I _R	0.2							mA
	@T _A =100℃		20							
Thermal Resistance From Junction to Case		R _{θJC}	30							℃/W
Operating Temperature Range		T _J	-50 to +150							℃
Storage Temperature Range		T _{STG}	-50 to +175							℃

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

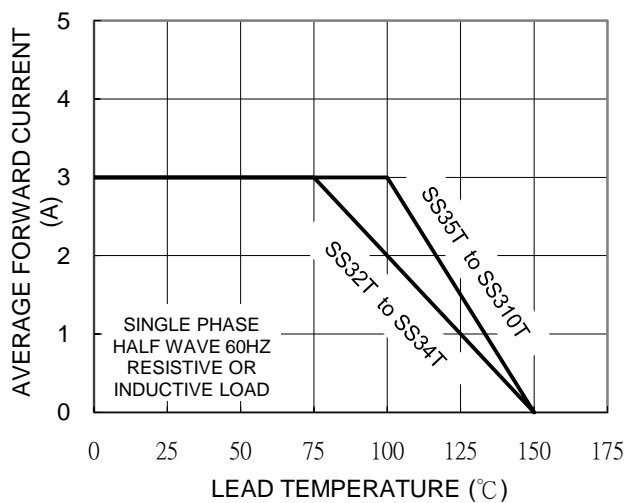


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

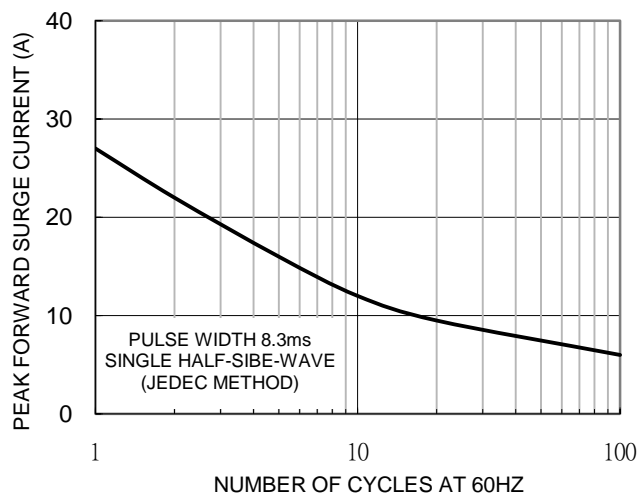


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

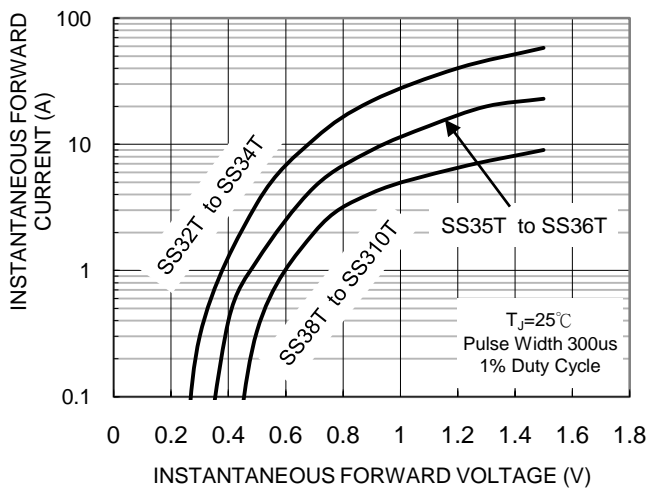
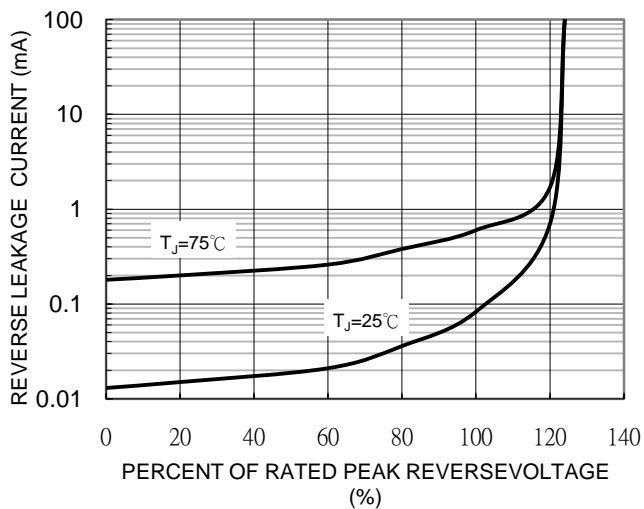
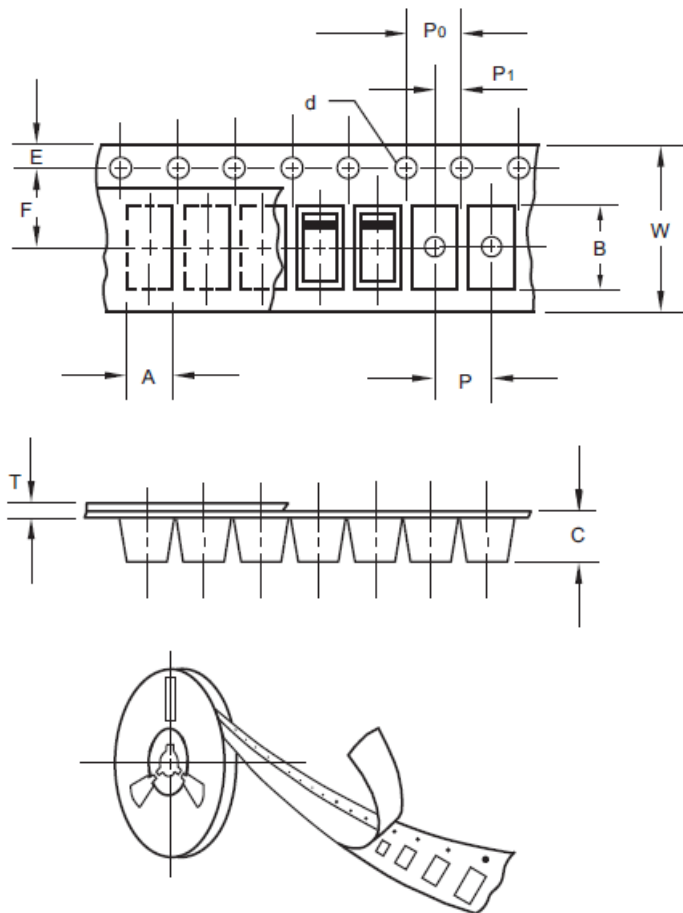


FIG.4 - TYPICAL REVERSE CHARACTERISTICS



PACKING INFORMATION

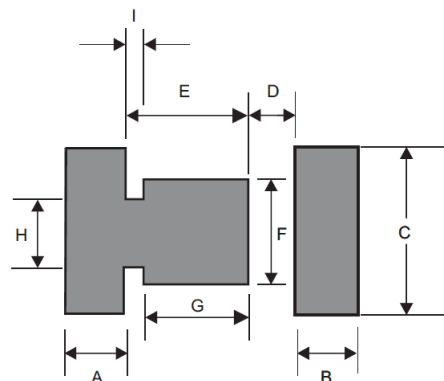


Item	Symbol	Tolerance	SOD-123T
Carrier width	A	0.1	1.90
Carrier length	B	0.1	3.90
Carrier depth	C	0.1	1.68
Sprocket hole	d	0.1	1.50
13" Reel outside diameter	D	2.0	-
13" Reel inner diameter	D ₁	min	-
7" Reel outside diameter	D	2.0	178.00
7" Reel inner diameter	D ₁	min	62.00
Feed hole diameter	D ₂	0.5	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 ₀	0.1	4.00
Embossment center	P ₁	0.1	2.00
Overall tape thickness	T	0.1	0.23
Tape width	W	0.3	8.00
Reel width	W ₁	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)