

FEATURES

- Glass passivated junction
- For Surface Mount Applications, Easy to pick and place
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- High temperature soldering guaranteed: 260°C/10 seconds at terminals,
- Component in accordance to RoHS 2011/65/EU



MECHANICAL DATA

- Case: SOD-123FL molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

		Symbols	R1A	R1B	R1D	R1G	R1J	R1K	R1M	Units
Maximum Recurrent Peak Reverse Voltage		V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage		V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage		V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current		$I_{(AV)}$	1.0							Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)		I_{FSM}	25.0							Amps
Maximum Instantaneous Forward Voltage at 1.0 A		V_F	1.3							Volts
Maximum DC Reverse Current at rated DC blocking voltage	$T_A=25^{\circ}C$	I_R	5.0							μA
	$T_A=125^{\circ}C$		100							
Maximum reverse recovery time(Note 1)		t_{rr}	150				250	500		ns
Typical junction capacitance(Note 2)		C_J	15.0							pF
Operating junction and storage temperature range		$T_J T_{STG}$	-55 to +150							$^{\circ}C$

Note: 1. Test conditions: $I_F=0.5A, I_R=1.0A, I_{RR}=0.25A$.

2. Measured at 1MHz and applied reverse voltage of 4.0 Volts D.C.

R1A THRU R1M

RATINGS AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

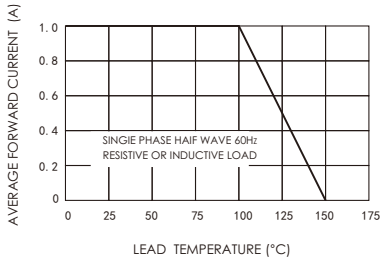


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

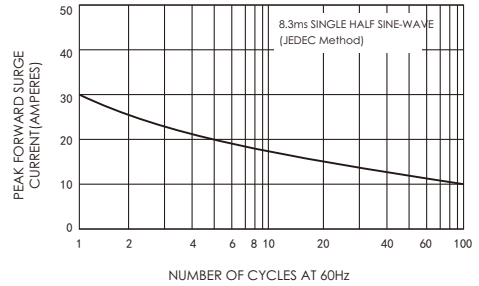


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

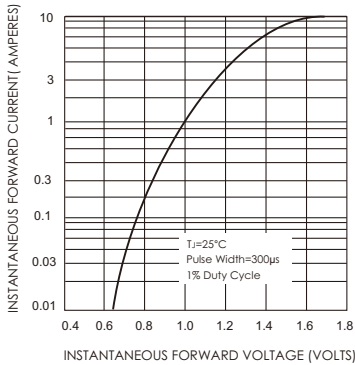


FIG.4-TYPICAL REVERSE CHARACTERISTICS

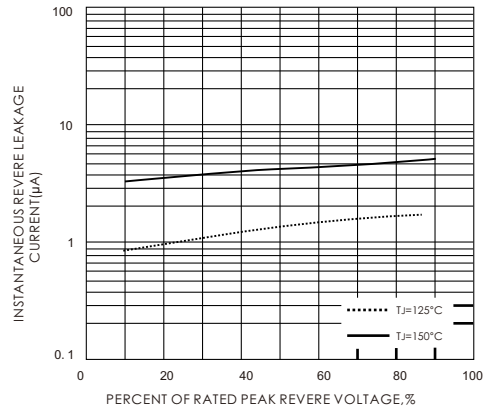


FIG.5-TYPICAL JUNCTION CAPACITANCE

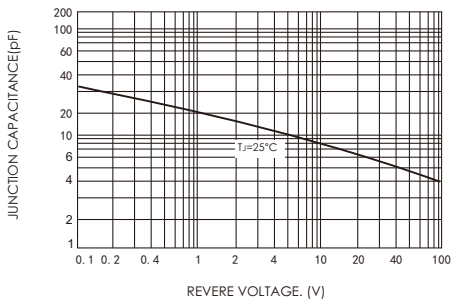
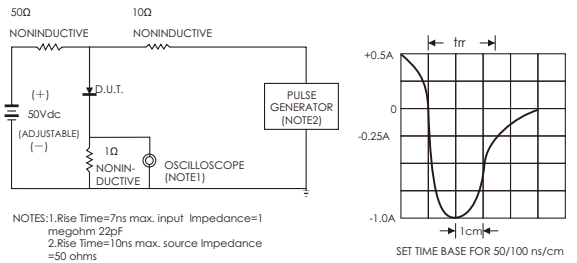


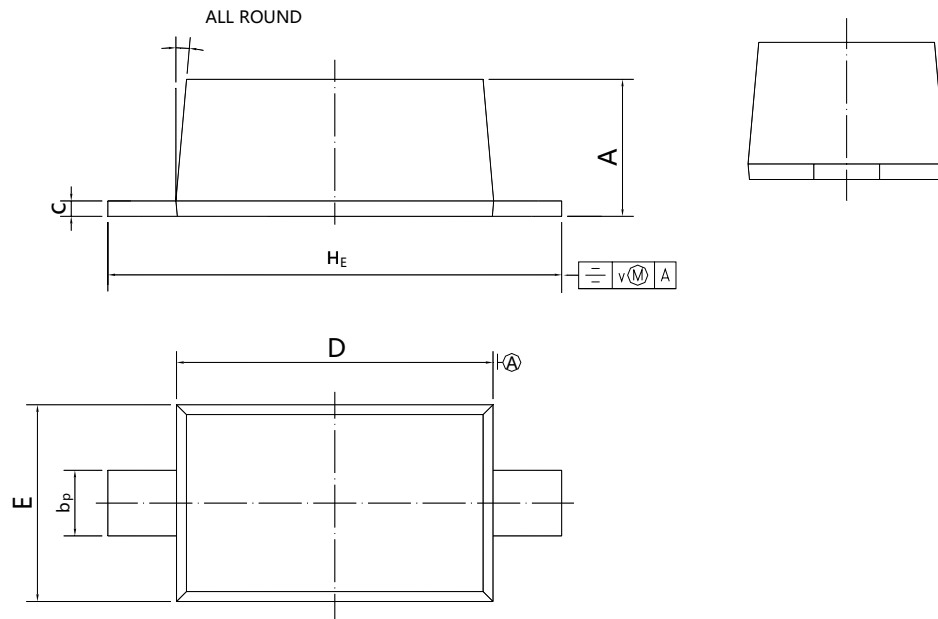
FIG.6-TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



R1A THRU R1M

PACKAGE OUTLINE

SOD-123FL



UNIT	A	b _p	c	D	E	H _E	v	
mm	1.35 0.80	1.0 0.5	0.25 -	2.9 2.4	1.95 1.38	3.90 3.40	0.2	5°
inch	0.053 0.031	0.043 0.020	0.010 -	0.114 0.095	0.077 0.054	0.154 0.134	0.008	5°