

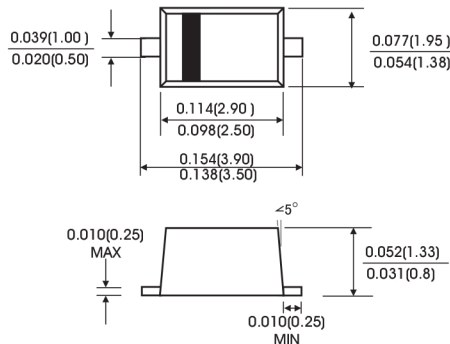
FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Glass passived junction
- Low forward voltage drop
- High current capability, High reliability
- Low power loss, high efficiency
- High surge current capability
- High speed switching, Low leakage
- High temperature soldering guaranteed:260 °C/10 seconds at terminals
- Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC

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
- Weight: 0.01 gram

SOD-123FL



Dimensions in inches and (millimeters)

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	UIA	UIB	UID	UIF	UIG	UIJ	UIK	UIM	Units
Maximum Recurrent Peak Reverse Voltage		VRRM	50	100	200	300	400	600	800	1000	Volts
Maximum RMS Voltage		VRMS	35	70	140	210	280	420	560	700	Volts
Maximum DC Blocking Voltage		VDC	50	100	200	300	400	600	800	1000	Volts
Maximum Average Forward Rectified Current 0.375"(9.5mm)lead length @ at TA=55°C		I(AV)	1.0								Amp
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)		IFSM	30.0								Amps
Maximum Instantaneous Forward Voltage at 1.0 A		VF	1.0				1.25	1.7			Volts
Maximum DC Reverse Current at rated DC blocking voltage	TA=25 °C	IR	5.0								μA
	TA=125 °C		100								
Typical Thermal resistance		RθJA	75								°C/W
		RθJL	27								
Maximum reverse recovery time(Note1)		TRR	50					75			ns
Typical junction capacitance(Note2)		CJ	15								pF
Operating junction and storage temperature range		TJ TSTG	-65 to+150								°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.

FIG.1-TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC

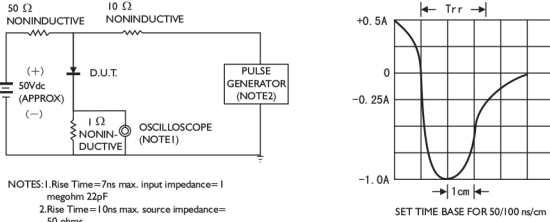


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

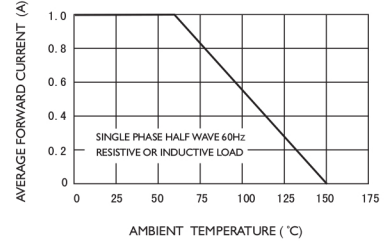


FIG.3-TYPICAL INSTANTANEOU FORWARD CHARACTERISTICS

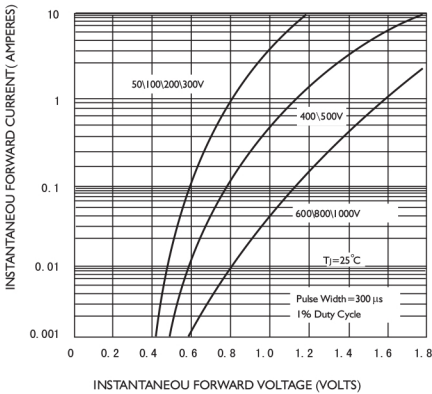


FIG.4-TYPICAL REVERSE CHARACTERISTICS

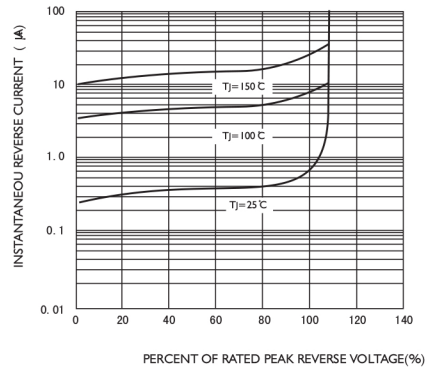


FIG.5-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

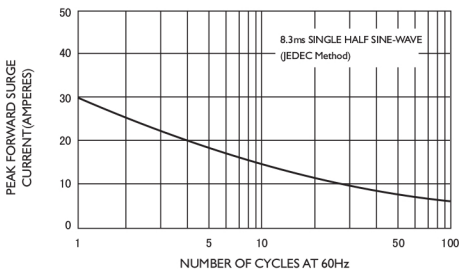


FIG.6-TYPICAL JUNCTION CAPACITANCE

