

KI SEMICONDCUTOR

E1A THRU E1M

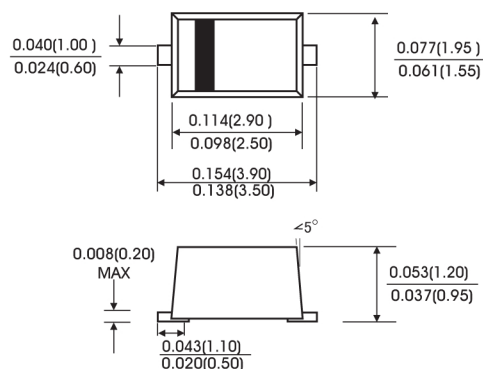
GLASS PASSIVATED
SUPER FAST RECOVERY RECTIFIER
Reverse Voltage: 50 to 1000 Volts
Forward Current:1.0Ampere

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 2002/95/EC and WEEE 2002/96/EC



SOD-123FL



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

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	E1A	E1B	E1D	E1G	E1J	E1K	E1M	Units
Maximum Recurrent Peak Reverse Voltage		VRRM	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage		VRMS	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage		VDC	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current at TL=100°C		I(AV)	1.0							Amps
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	0.95			1.25		1.70		Volts
Maximum DC Reverse Current at rated DC blocking voltage	TA=25°C	IR	5.0							μA
	TA=100°C		100							
Maximum reverse recovery time(Note1)		t _{rr}	35							ns
Typical junction capacitance(Note2)		C _J	15.0							pF
Operating junction and storage temperature range		T _J T _{STG}	-55 to +150							°C

Note: 1. Test conditions: IF=0.5A,IR=1.0A,IRR=0.25A.

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

RATINGS AND CHARACTERISTIC CURVES E1A THRU E1M

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

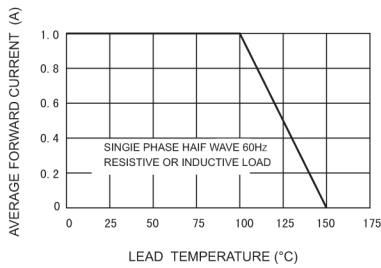


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

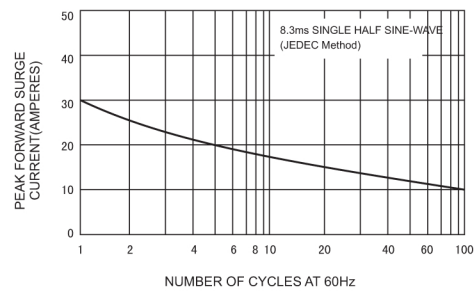


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

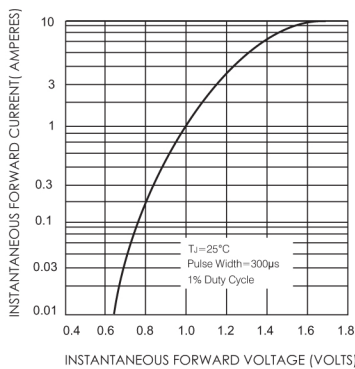


FIG.4-TYPICAL REVERSE CHARACTERISTICS

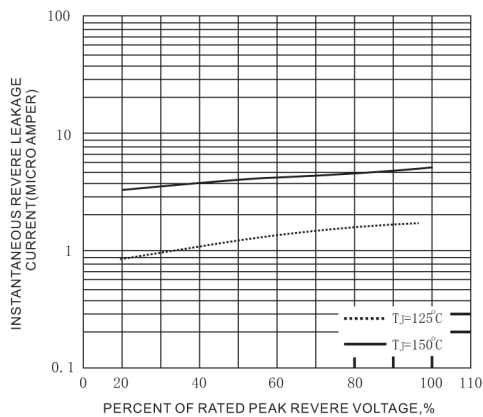


FIG.5-TYPICAL JUNCTION CAPACITANCE

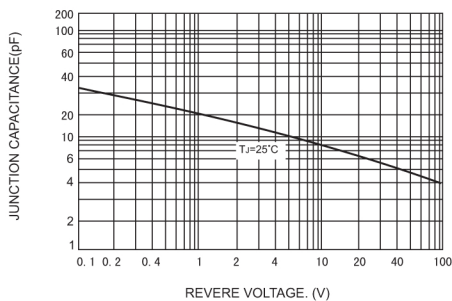


FIG.6-TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC

