

1 Amp Super Fast Recovery

Features:

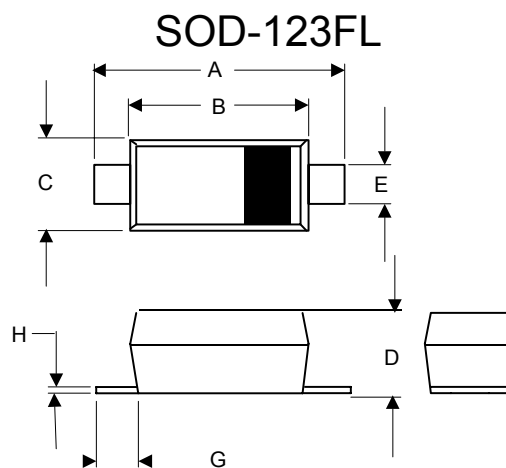
- For Surface Mount Applications
- Low Power Loss, High Efficiency
- High Temp Soldering: 260°C for 10 Seconds At Terminals
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Lead Free Finish/RoHS Compliant (Note1)("P"Suffix designates Compliant. See ordering information)
- Welding Iron Temp: 350°C for 3s max.
- Storage Condition: Less than 30°C, RH<70%

Maximum Ratings:

- Operating Temperature: -50°C to +150°C
- Storage Temperature: -50°C to +150°C
- Maximum Thermal Resistance; 75°C/W Junction To Ambient.

Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
E1A	E1A	50V	35V	50V
E1B	E1B	100V	70V	100V
E1C	E1C	150V	105V	150V
E1D	E1D	200V	140V	200V
E1E	E1E	300V	210V	300V
E1G	E1G	400V	280V	400V
E1H	E1H	500V	350V	500V
E1J	E1J	600V	420V	600V

1 Amp Super Fast Recovery Silicon Rectifier 50 to 600 Volts

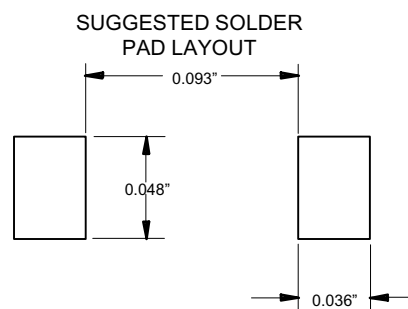


DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.140	.152	3.55	3.85	
B	.100	.112	2.55	2.85	
C	.055	.071	1.40	1.80	
D	.037	.053	0.95	1.35	
E	.020	.039	0.50	1.00	
G	.010	----	0.25	----	
H	----	.008	----	.20	

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	1.0A	$T_a = 50^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	30A	8.3ms, half sine
Maximum Instantaneous Forward Voltage E1A-E1D E1E-E1G E1H-E1J	V_F	.95V 1.25V 1.70V	$I_{FM} = 1.0A$; $T_a = 25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	5PA 100PA	$T_a = 25^\circ\text{C}$ $T_a = 100^\circ\text{C}$
Maximum Reverse Recovery Time	T_{rr}	35ns	$I_F=0.5A, I_R=1.0A,$ $I_{rr}=0.25A$
Typical Junction Capacitance	C_J	10pF	Measured at 1.0MHz, $V_R=4.0V$

Note: 1. High Temperature Solder Exemption Applied, see EU Directive Annex 7.



RATING AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CHARACTERISTICS

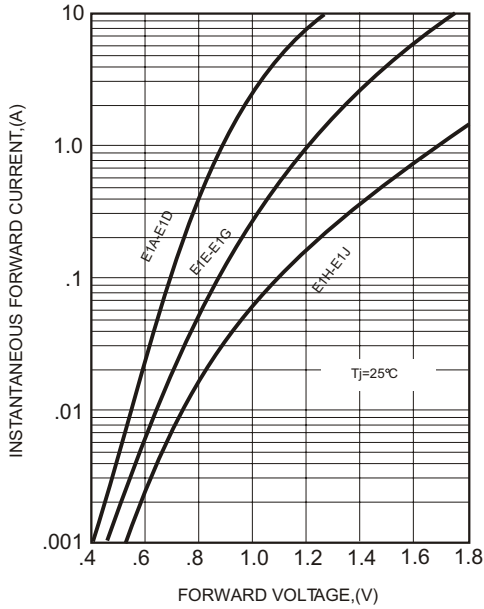


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

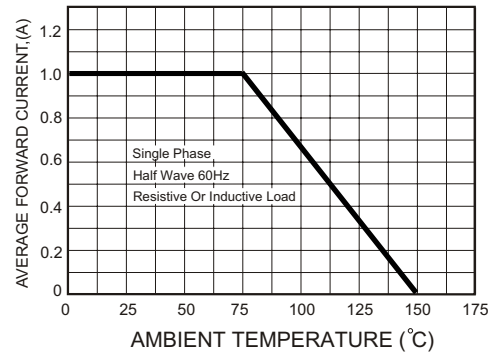
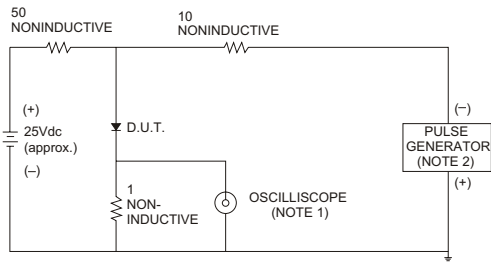


FIG.3- TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTICS



NOTES: 1. Rise Time= 7ns max., Input Impedance= 1 megohm.22pF.
 2. Rise Time= 10ns max., Source Impedance= 50 ohms.

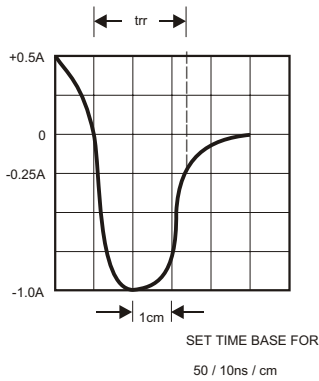


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

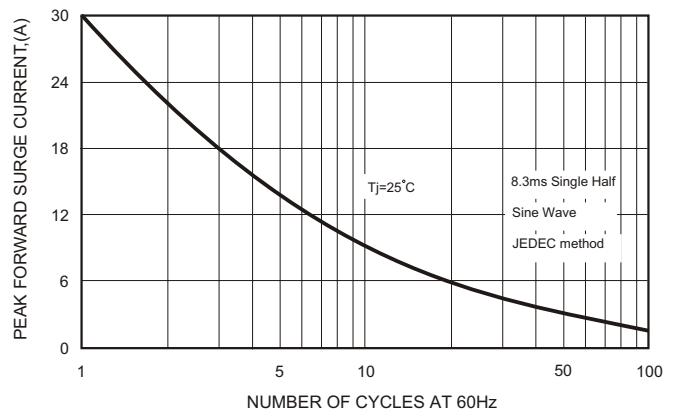


FIG.5-TYPICAL JUNCTION CAPACITANCE

