



Fast Recovery Rectifier

Features

- Fast switching speed for high efficiency
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed:
260°C/10 seconds, 0.375" (9.5mm) lead length
- RoHS and REACH Compliance



Mechanical Data

Case:	Transfer molded plastic
Polarity	Color band denotes cathode end
Epoxy:	UL94V – 0 rate flame retardant
Mounting position:	Any
Weight:	0.007 ounce, 0.20 gram

Maximum Ratings ($T_{Ambient}=25^{\circ}\text{C}$ unless noted otherwise)

Symbol	Description	1F1	1F2	1F3	1F4	1F5	1F6	1F7	Unit	Conditions
VRRM	Max Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	V	
VRMS	Max RMS Voltage	35	70	140	280	420	560	700	V	
VDC	Max DC Blocking Voltage	50	100	200	400	600	800	1000	V	
I(AV)	Max Average Forward Rectified Current	1.0							A	0.375 (9.5MM) TC=25°C
IFSM	Peak Forward Surge Current	25							A	JEDEC method
TJ,TSTG	Operating and Storage Temperature Range	-65 to +125, -65 to +150							°C	
TRR	Maximum Reverse Recovery Time	150		250		500			A2s	IF=0.5A IR=1.0A IRR=0.25A

Electrical Characteristics ($T_{Ambient}=25^{\circ}\text{C}$ unless noted otherwise)

Symbol	Description	1F1	1F2	1F3	1F4	1F5	1F6	1F7	Unit	Conditions
V _F	Max Instantaneous Forward Voltage	1.0							V	Drop per Bridge element 1.0A
I _R	Max DC Reverse Current at Rated DC Blocking Voltage	5.0							μA	T _A =25°C
		100							mA	T _A =100°C
R _{θ-JA}	Typical Thermal Resistance	50							°C/W	Note 1
C _J	Typical Junction Capacitance	15							pF	Measured at 1.0MHz / 4.0V

Note:

1. Thermal resistance from junction to ambient with 0.375" (9.5mm) lead length, PCB mounted.

RATINGS AND CHARACTERISTIC CURVES 1F1 THRU 1F7

FIG.1-TYPICAL FORWARD CURRENT
DERATING CURVE

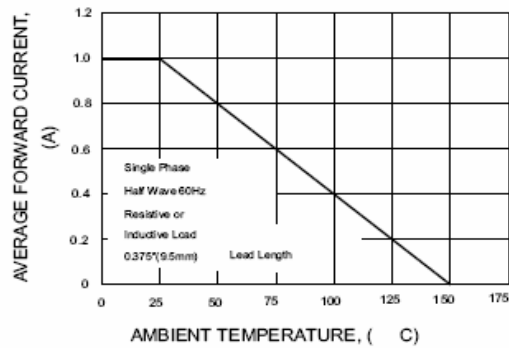


FIG.2-MAXIMUM NON-REPETITIVE PEAK
FORWARD SURGE CURRENT

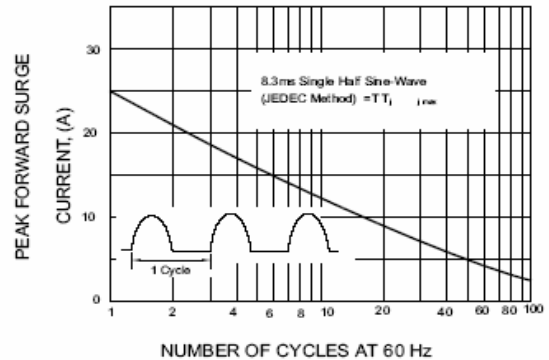


FIG.3-TYPICAL INSTANTANEOUS
FORWARD CHARACTERISTICS

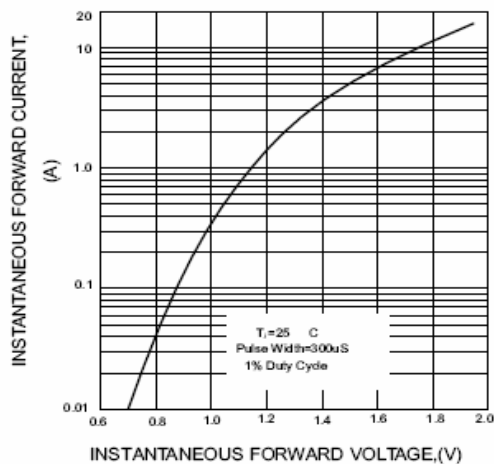


FIG.4-TYPICAL REVERSE
CHARACTERISTICS

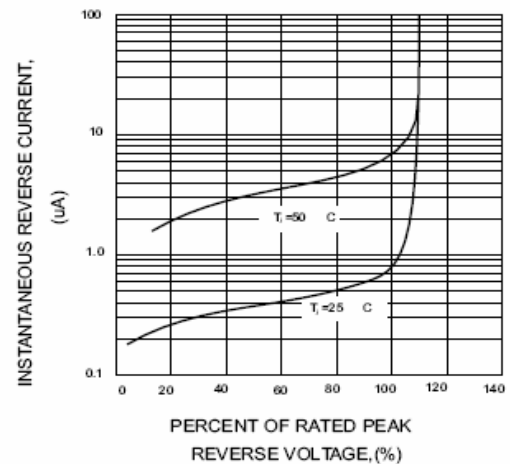


FIG.5-TYPICAL JUNCTION CAPACITANCE

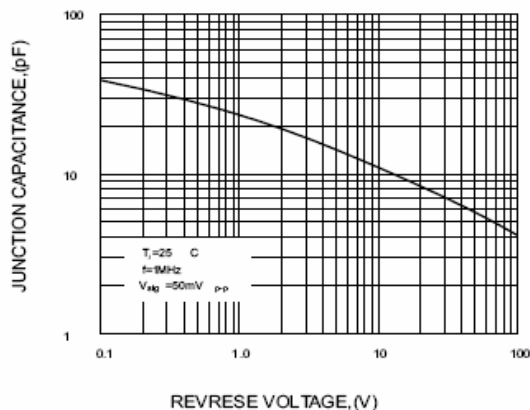
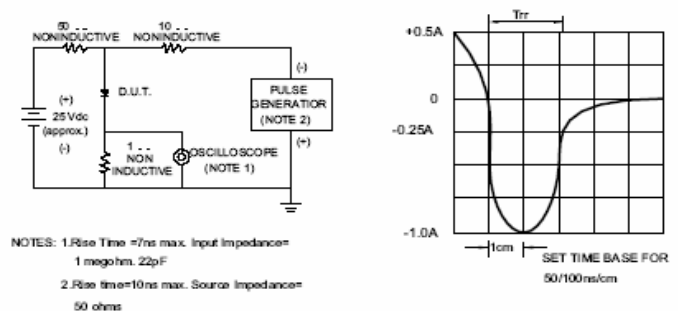
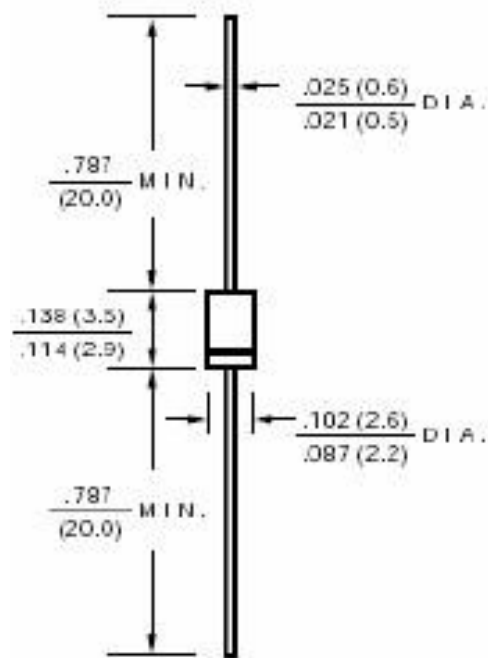


FIG.6-TEST CIRCUIT DIAGRAM AND
REVERSE RECOVERY TIME CHARACTERISTIC



Dimensions in inches (mm)



R-1

Contact us:

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