FAST RECOVERY RECTIFIER

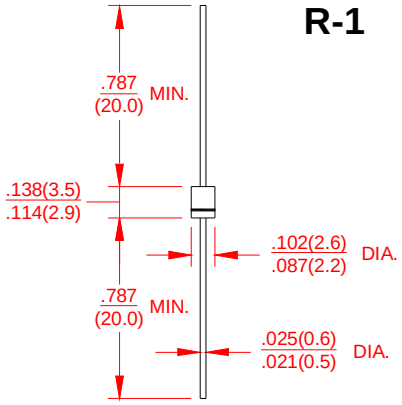
1F1 THRU 1F7

VOLTAGE RANGE **50 to 1000 Volts**
CURRENT **1.0 Ampere**

FEATURES

- Low coat construction
- Fast switching for high efficiency.
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed:
  260℃/10 secods/.375”(9.5mm)lead length at 5 lbs(2.3kg) tension

R-1



Dimensions in inches and (millimeters)

MECHANICAL DATA

- Case: Transfer molded plastic
- Epoxy: UL94V-O rate flame retardant
- Polarity: Color band denotes cathode end
- Lead: Plated axial lead, solderable per MIL-STD-202E method 208C
- Mounting position: Any
- Weight: 0.007ounce, 0.20 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

- Ratings at 25^{O}C ambient temperature unless otherwise specified
- Single Phase, half wave, 60Hz, resistive or inductive load
- For capacitive load derate current by 20%

	SYMBOLS	1F1	1F2	1F3	1F4	1F5	1F6	1F7	UNITS
Maximum Repetitive 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 0.375”(9.5mm) lead length at T_A= 25℃	$I_{(AV)}$	1.0							Amps
Peak Forward Surge Current 8.3mS single half sine wave superimposed on rated load (JEDEC method)	I_{FSM}	25							Amps
Maximum Instantaneous Forward Voltage @ 1.0A	V_F	1.3							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage T_A = 25℃	I_R	5.0							μAmps
Maximum DC Reverse Current at Rated DC Blocking Voltage T_A = 100℃		50							
Maximum Reverse Recovery Tine (Note 3) T_J=25℃	Trr	150		250		500			ns
Typical Junction Capacitance (Note 1)	C_J	15							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	50							℃/W
Operating and Storage Temperature Range	T_JT_{STG}	-55 to +150							℃

Notes:

1.Measured at 1.0MHz and Applied Reverse Voltage of 4.0Volits.

2.Thermal Resistance from junction to Ambient at .375”(9.5mm)lead length, P.C.board mounted.

3.Reverse Recovery Test Conditions:If=0.5A,Ir=1.0A,Irr=0.25A

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	CURRENT	1.0 Ampere

RATING AND CHRACTERISTIC CURVES 1F1 Thur 1F7

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

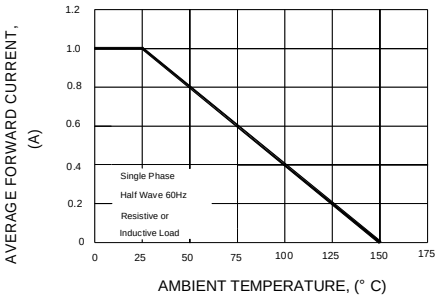


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

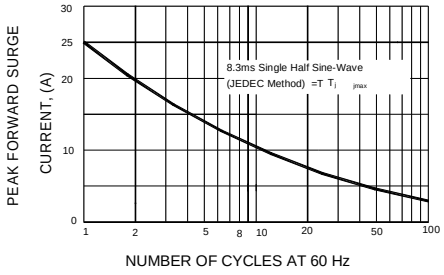


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

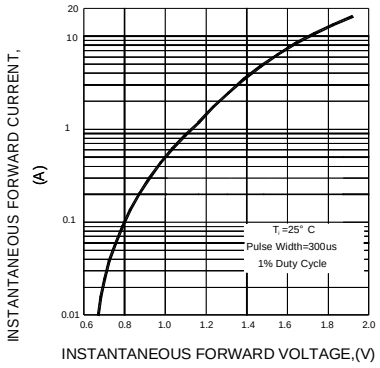


FIG.4-TYPICAL REVERSE CHARACTERISTICS

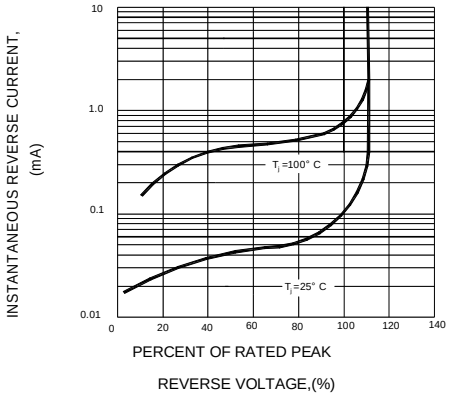


FIG.5-TYPICAL JUNCTION CAPACITANCE

