



FUKUCOM COMPANY LTD.

福 靈 有 限 公 司

FLAT P, 3/F., EVEREST INDUSTRIAL CENTRE, 396 KWUN TONG ROAD,
KWUN TONG, KOWLOON, HONG KONG.

TEL: 852-2790 0314 FAX: 852-2790 0206



GENERAL PURPOSE SILICON RECTIFIER

1A1 THRU 1A9

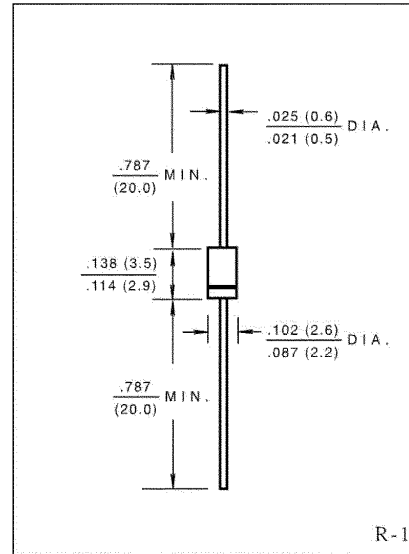
VOLTAGE RANGE 50 to 1500 Volts
CURRENT 1.0 Ampere

FEATURES

- Low cost construction
- Low forward voltage drop
- Low reverse leakage
- High forward surge current capability.
- High temperature soldering guaranteed:
260°C/10 seconds, 0.375" (9.5mm) lead length
at 5 lbs (2.3kg) tension.

MECHANICAL DATA

- Case: transfer molded plastic
- Epoxy: UL94V - 0 rate flame retardant.
- Polarity: Color band denotes cathode end.
- Lead: Plated axial lead, solderable per MIL - STD - 202E
method 208C
- Mounting position: Any
- Weight: 0.007 ounce, 0.20grams



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

- Ratings 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	1A1	1A2	1A3	1A4	1A5	1A6	1A7	1A8	1A9	UNIT
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	1200	1500	Volts
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	560	700	840	1050	Volts
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	1200	1500	Volts
Maximum Average Forward Rectified Current, 0.375" (9.5mm) lead length at T _A = 25°C	I _(AV)	1.0									Amp
Peak Forward Surge Current 8.3ms single half sine - wave superimposed on rated load (JEDEC method)	I _{FSM}	25									Amps
Maximum Instantaneous Forward Voltage at 1.0A	V _F	1.1									Volts
Maximum DC Reverse Current at rated T _A = 25°C	I _R	5.0									μA
DC blocking voltage T _A = 100°C		50									μA
Maximum Full Load Reverse Current, full cycle average 0.375" (9.5mm) lead length at T _L = 75°C	I _{R(AV)}	30									μA
Typical Junction Capacitance (Note 1)	C _J	15									pF
Typical Thermal Resistance (Note2)	R _{θJA}	50									°C/W
Operating and Storage Temperature Range	T _J	(-65 to +175)									°C
Storage Temperature Range	T _{STG}	(-65 to +175)									°C

NOTES:

1. Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts.
2. Thermal Resistance from Junction to Ambient at 0.375" (9.5mm) lead length, P.C. board mounted.



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RATINGS AND CHARACTERISTIC CURVES 1A1 THRU 1A9

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

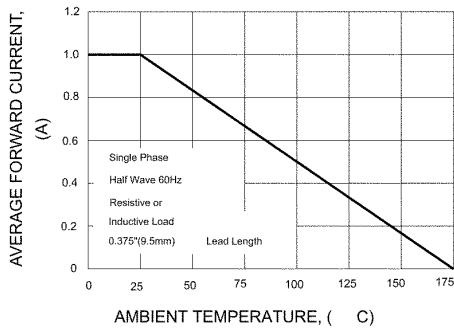


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

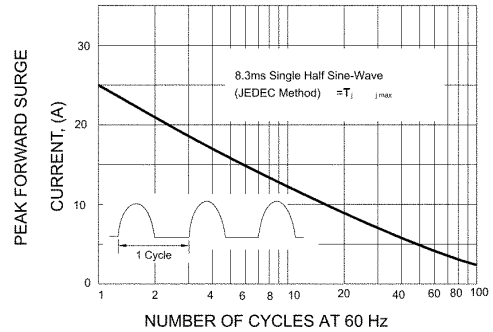


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

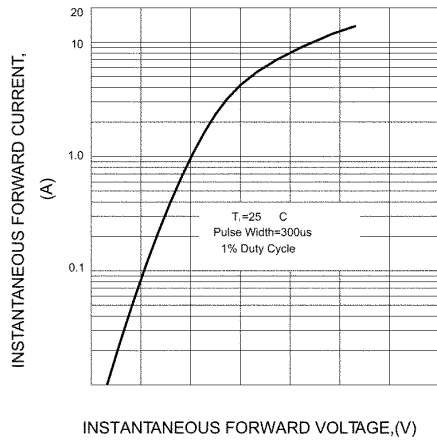


FIG.4-TYPICAL REVERSE CHARACTERISTICS

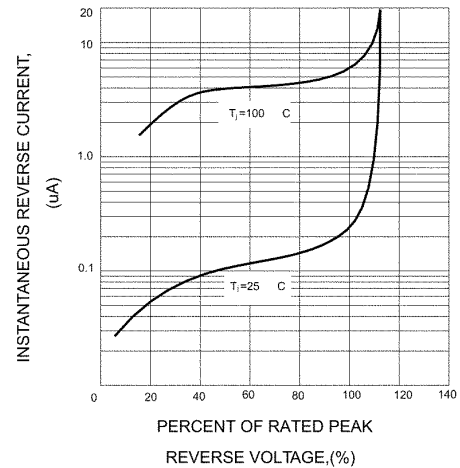


FIG.5-TYPICAL JUNCTION CAPACITANCE

