



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: 2790-0314 FAX: 2790-0206

	<p>RECTIFIER SPECIALISTS</p>	<p>1S2 THRU 1S10</p>
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TECHNICAL SPECIFICATIONS OF SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE - 20 to 100 Volts

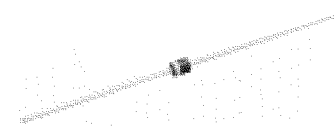
CURRENT - 1.0 Ampere

**FEATURES**

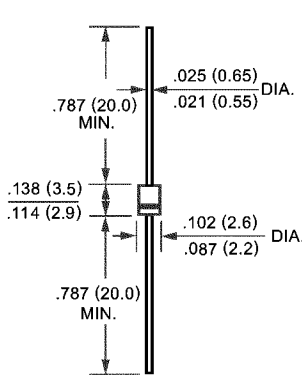
- \* Low power loss, high efficiency
- \* Low leakage
- \* Low forward voltage
- \* High current capability
- \* High speed switching
- \* High surge capability
- \* High reliability

**MECHANICAL DATA**

- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Lead: MIL-STD-202E, Method 208 guaranteed
- \* Polarity: Color band denotes cathode end
- \* Mounting position: Any
- \* Weight: 0.12 gram



R-1



Dimensions in inches and (millimeters)

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25 °C ambient temperature unless otherwise specified.  
Single phase, half wave, 60 Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.

	SYMBOL	1S2	1S3	1S4	1S5	1S6	1S8	1S10	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	20	30	40	50	60	80	100	Volts
Maximum RMS Voltage	VRMS	14	21	28	35	42	56	70	Volts
Maximum DC Blocking Voltage	VDC	20	30	40	50	60	80	100	Volts
Maximum Average Forward Rectified Current .375"(9.5mm) lead length	IO	1.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	35							Amps
Maximum Instantaneous Forward Voltage at 1.0A DC	VF	.55		.70		0.85		Volts	
Maximum DC Reverse Current at Rated DC Blocking Voltage	@TA = 25°C	1.0							mAmps
	@TA = 100°C	10							mAmps
Typical Thermal Resistance (Note 1)	RθJA	50							°C/W
Typical Junction Capacitance (Note 2)	CJ	110							pF
Operating Temperature Range	TJ	-65 to + 150							°C
Storage Temperature Range	TSTG	-65 to + 150							°C

NOTES : 1. Thermal Resistance (Junction to Ambient): Vertical PC Board Mounting, 0.375"(9.5 mm) Lead Length.  
2. Measured at 1 MHz and applied reverse voltage of 4.0 volts.



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RATING AND CHARACTERISTIC CURVES (1S2 THRU 1S10)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

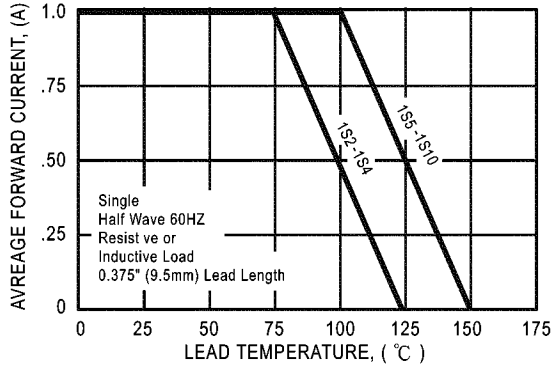


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

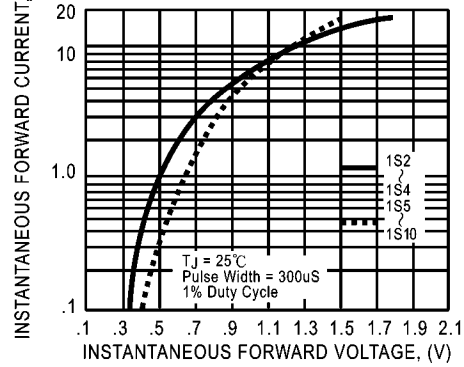


FIG. 3A - TYPICAL REVERSE CHARACTERISTICS

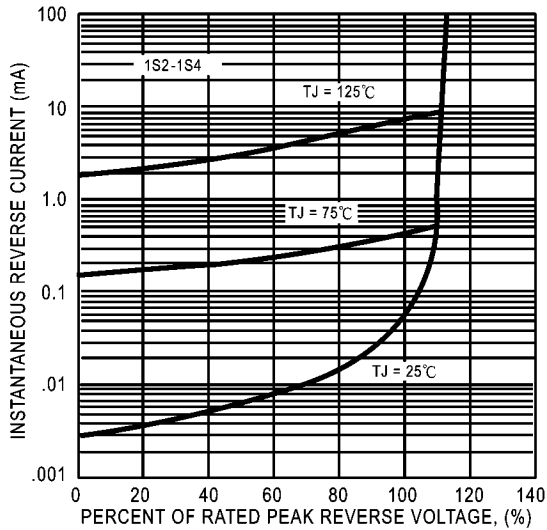


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

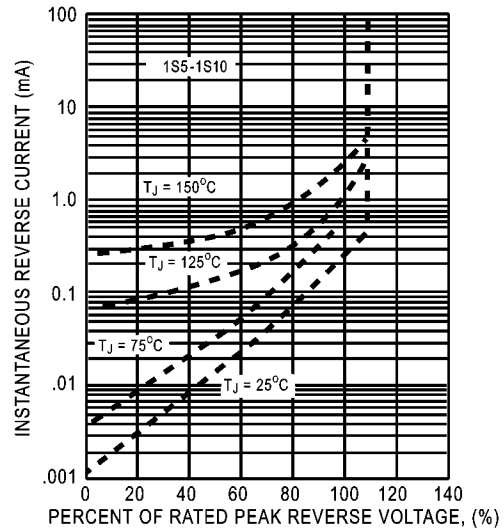


FIG. 4 - TYPICAL JUNCTION CAPACITANCE

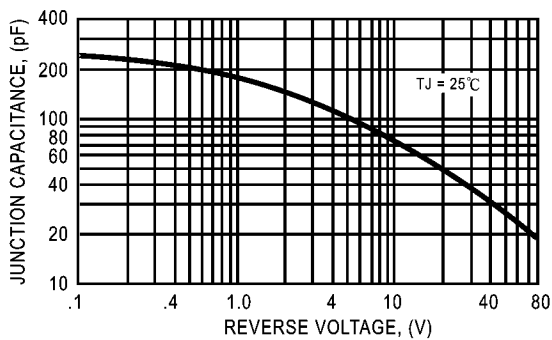


FIG. 5 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

