

1S2 THRU 1S10

TECHNICAL SPECIFICATIONS OF SCHOTTKY BARRIER RECTIFIER
VOLTAGE RANGE -20 to 100Volts CURRENT -1.0 Ampere

FETURES

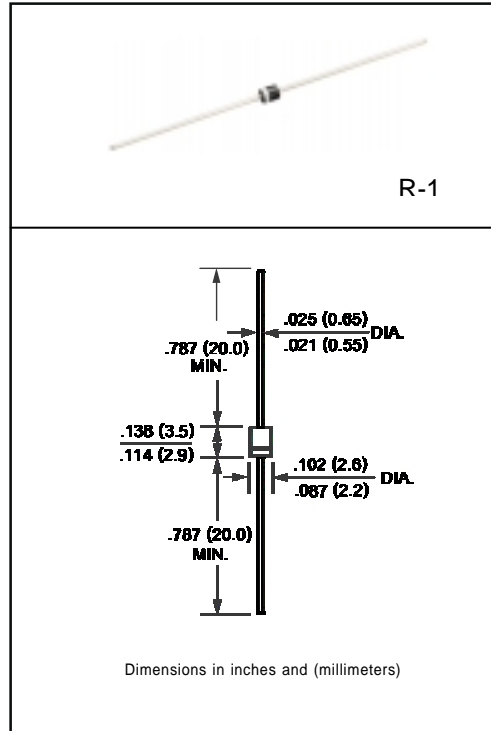
- *Low power loss, high efficiency
- *Low leakage
- *Low forward voltage
- *High current capability
- *High speed switching
- *High surge capability
- *High reliability

MECHANICAL DATA

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

MAXIMUM RATINGS ANDELECTRICALCHARACTERISTICS

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	V _{RRM}	20	30	40	50	60	80	100	Volts
Maximum RMS Voltage	V _{RMS}	14	21	28	35	42	56	70	Volts
Maximum DC Blocking Voltage	V _{DC}	20	30	40	50	60	80	100	Volts
Maximum Average Forward Rectified Current .375"(9.5mm) lead length	I _O	1.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	35							Amps
Maximum Instantaneous Forward Voltage at 1.0A DC	V _F	.55		.70		.85		Volts	
Maximum DC Reverse Current		1.0							mAmps
at Rated DC Blocking Voltage									10
Typical Thermal Resistance (Note 1)	R _{θJA}	50							
Typical Junction Capacitance (Note 2)	C _J	110							pF
Operating Temperature Range	T _J	-65 to + 150							°C
Storage Temperature Range	T _{STG}	-65 to + 150							°C

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

RATING AND CHARACTERISTIC CURVES (1S2 THRU 1S10)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

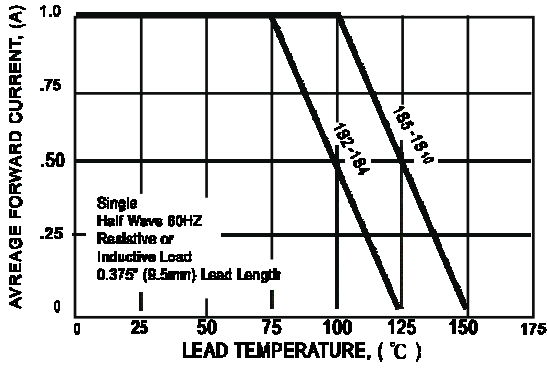


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

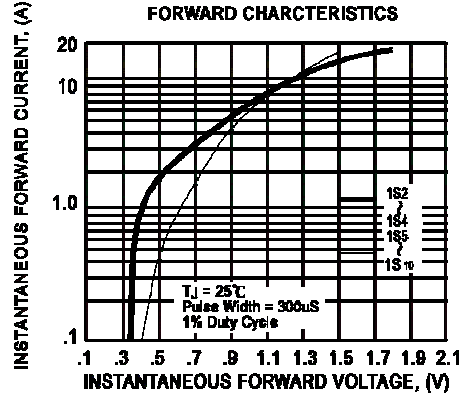


FIG. 3A - TYPICAL REVERSE CHARACTERISTICS

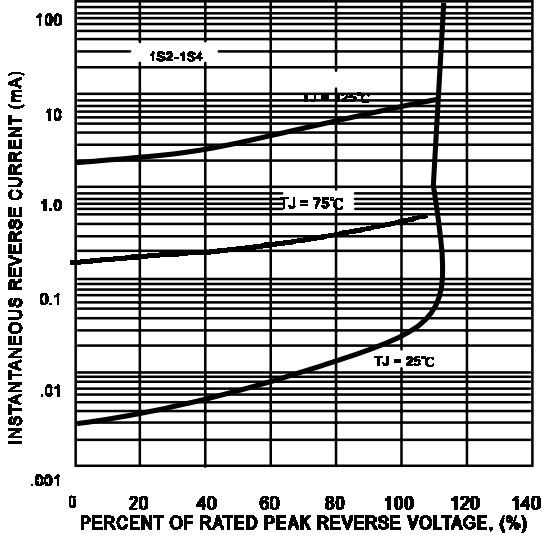


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

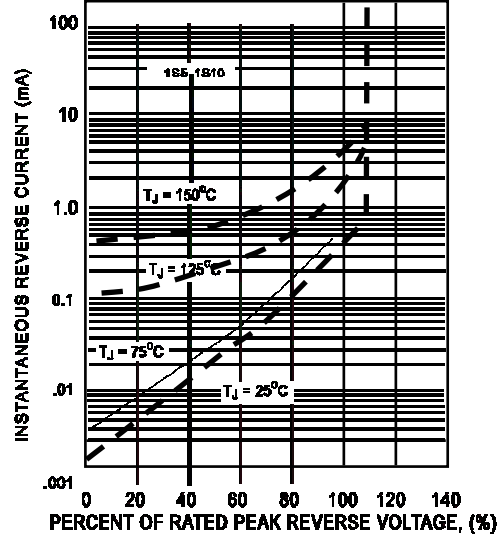


FIG. 4 - TYPICAL JUNCTION CAPACITANCE

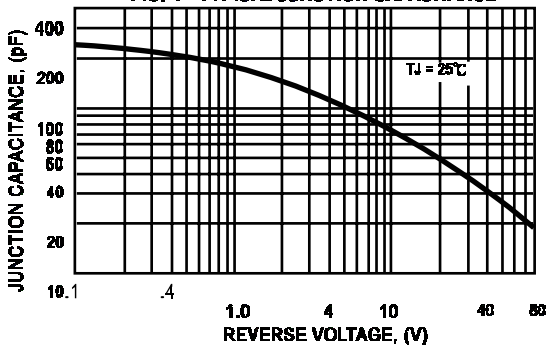


FIG. 5 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

