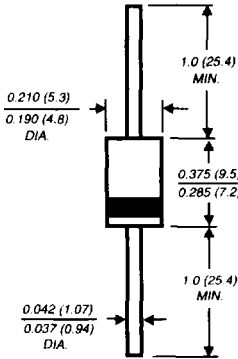


SUF15G AND SUF15J

ULTRA FAST EFFICIENT RECTIFIER

Reverse Voltage - 400 and 600 Volts Forward Current - 1.5 Amperes

Case Style GP20



Dimension in inches and (millimeters)

FEATURES

- ◆ Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- ◆ Glass passivated chip junction
- ◆ Superfast recovery time for high efficiency
- ◆ High forward surge current capability
- ◆ Low leakage current
- ◆ Low power loss
- ◆ High temperature soldering guaranteed: 260°C/10 seconds, at 0.375" (9.5mm) lead length, 5 lbs. (2.3kg) tension

MECHANICAL DATA

Case: Plastic molded body over passivated chip
Terminals: Plated axial leads solderable per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode end
Mounting Position: Any
Weight: 0.03 ounces, 0.8 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOLS	SUF15G	SUF15J	UNITS
Maximum repetitive peak reverse voltage	VRRM	400	600	Volts
Maximum RMS voltage	VRMS	280	420	Volts
Maximum DC blocking voltage	VDC	400	600	Volts
Maximum average forward rectified current, 0.375" (9.5mm) lead length at TA=50°C	I(AV)	1.5		Amps
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) at TA=50°C	IFSM	50.0		Amps
Maximum instantaneous forward voltage at 1.5A	VF	1.80		Volts
Maximum peak reverse current at rated peak reverse voltage	IR	10.0 100		μA
Maximum reverse recovery time (NOTE 1)	trr	35.0		ns
Typical junction capacitance (NOTE 2)	CJ	35		pF
Typical thermal resistance (NOTE 2)	ReJA	65.0		°C/W
Operating junction and storage temperature range	TJ, TSTG	-55 to +150		°C

NOTES:

- (1) Reverse recovery test condition: IR=0.5A, IR=1.0A, IRR=0.25A
- (2) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts
- (3) Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted

RATINGS AND CHARACTERISTIC CURVES SUF15G AND SUF15J

FIG. 1 - MAXIMUM FORWARD CURRENT DERATING CURVE

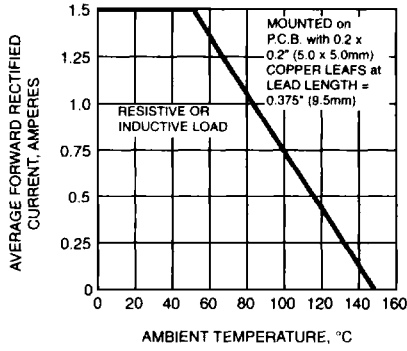


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

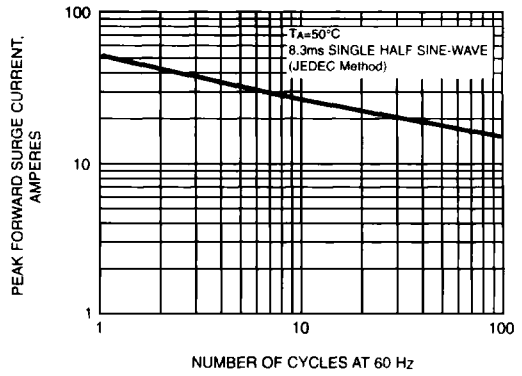


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

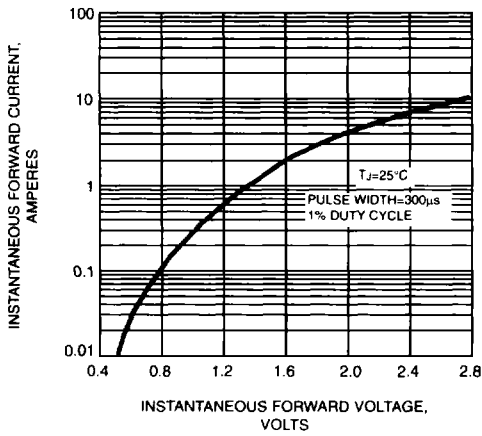


FIG. 4 - TYPICAL REVERSE LEAKAGE CHARACTERISTICS

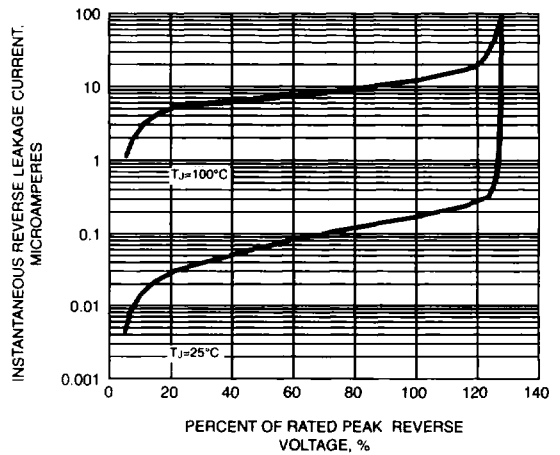


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

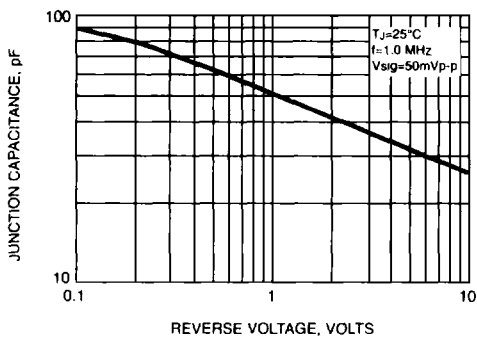


FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE

