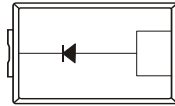
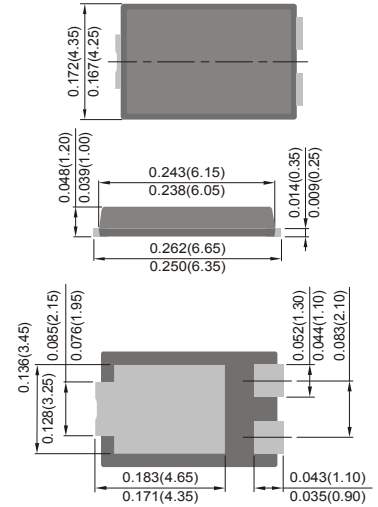


FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction ,majority carrier conduction
- Guard ring for overvoltage protection
- Low power loss ,high efficiency
- High current capability ,Low forward voltage drop
- Single rectifier construction
- High surge capability
- For use in low voltage ,high frequency inverters, free wheeling ,and polarity protection applications
- High temperature soldering guaranteed:260°C/10 seconds, 0.25"(6.35mm)from case
- Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC



TO-277



MECHANICAL DATA

Case : Packed with FRP substrate and epoxy underfilled

Terminals : Pure Tin plated (Lead-Free), solderable per MIL-STD-750, Method 2026.

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

		Symbols	SP 1020L	SP 1030L	SP 1040L	SP 1050L	SP 1060L	SP 1080L	SP 10100L	SP 10150L	SP 10200L	Units
Maximum repetitive peak reverse voltage		VRRM	20	30	40	50	60	80	100	150	200	Volts
Maximum RMS voltage		VRMS	14	21	28	35	42	56	70	105	140	Volts
Maximum DC blocking voltage		VDC	20	30	40	50	60	80	100	150	200	Volts
Maximum average forward rectified current (see Fig.1)		l(AV)	10.0									Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)		lFSM	150.0									Amps
Maximum instantaneous forward voltage at 10.0 A(Note 1)		VF	0.45			0.55		0.80		0.85	0.90	Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	TA = 25°C	IR	0.2									mA
	TA = 125°C		15			50						
Typical thermal resistance (Note 2)		RθJC	2.5									°C/W
Operating junction temperature range		TJ	-65 to+150									°C
Storage temperature range		TSTG	-65 to+150									°C

Notes: 1.Pulse test: 300 μ s pulse width,1% duty cycle

2.Thermal resistance from junction to case

FIG.1-FORWARD CURRENT DERATING CURVE

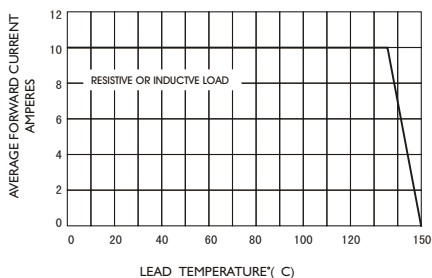


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

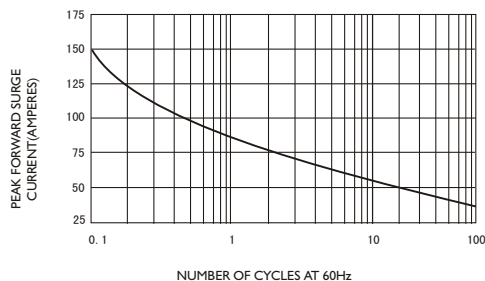


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

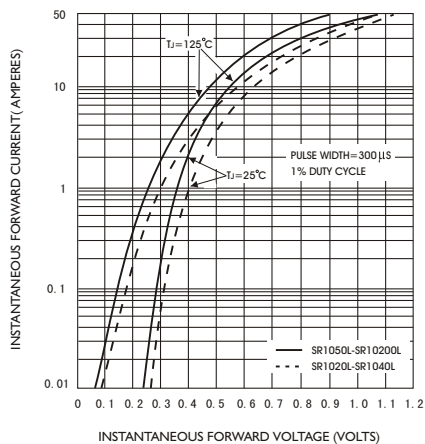


FIG.4-TYPICAL REVERSE CHARACTERISTICS

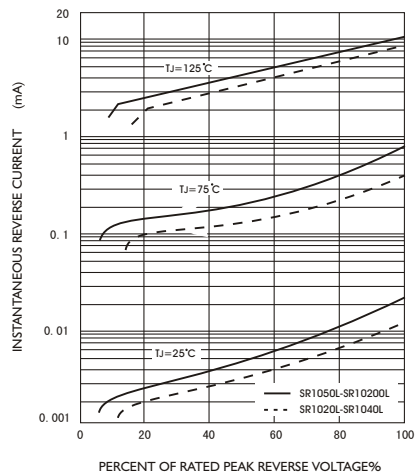


FIG.5-TYPICAL JUNCTION CAPACITANCE

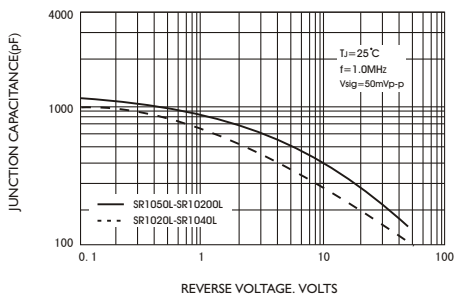


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

