

SILICON BRIDGE RECTIFIER

REVERSE VOLTAGE : 35 --- 200 V
CURRENT: 10.0A

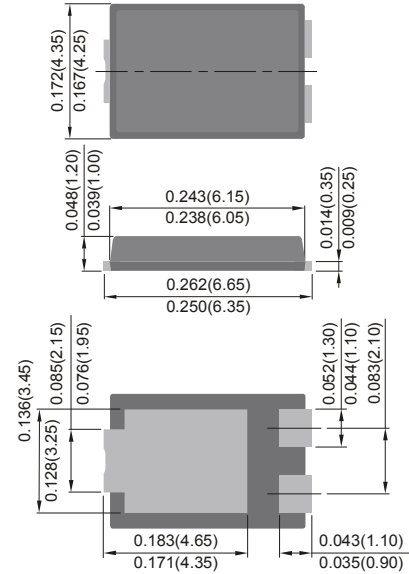
Features

- Metal silicon junction majority carrier conduction
- High surge capability
- Low power loss,high efficiency
- High Forward Surge Capability
- For use in low voltage high frequency inverters free wheeling, and poparity protection applications
- Excellent High Temperature Stability
- Plastic material-UL flammability 94V-0

Mechanical Data

- Case: TO-277, molded plastic
- Polarity:Cathode Band
- Mounting Position:Any

TO-277



Maximum Ratings and Electrical Characteristics

@ Ta =25 C unless otherwise specified Single Phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

	Symbols	SP 1035L	SP 1045L	SP 1050L	SP 1060L	SP 10100L	SP 10150L	SP 10200L	Units
Maximum repetitive peak reverse voltage	VRRM	35	45	50	60	100	150	200	Volts
Maximum RMS voltage	VRMS	25	32	35	42	70	105	140	Volts
Maximum DC blocking voltage	VDC	35	45	50	60	100	150	200	Volts
Maximum average forward rectified current See Fig. 1	I(AV)	10.0							Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	150.0							Amps
Maximum instantaneous forward voltage at 15 A	VF	0.45	0.55		0.70	0.80	0.85		Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	Tc = 25°C	0.3							mA
	Tc = 125°C	30		50					
Typical thermal resistance (Note 2)	RθJC	3.0							°C/W
Operating junction temperature range	TJ	-65 to +150							°C
Storage temperature range	TSTG	-65 to +150							°C

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

2.Thermal resistance from junction to case

RATINGS AND CHARACTERISTIC CURVES

FIG.1-FORWARD CURRENT DERATING CURVE

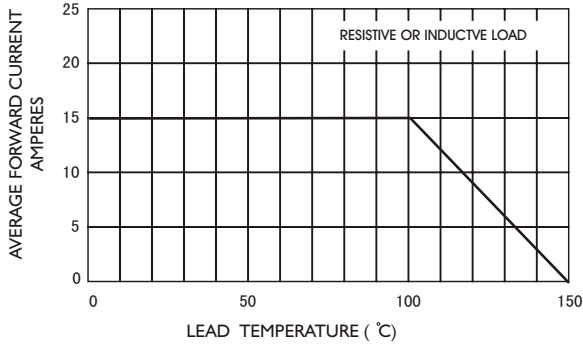


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

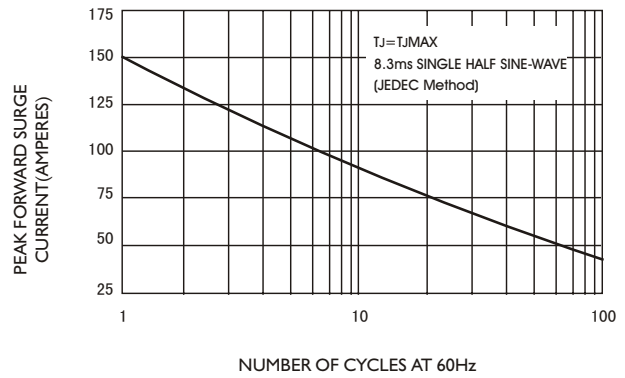


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

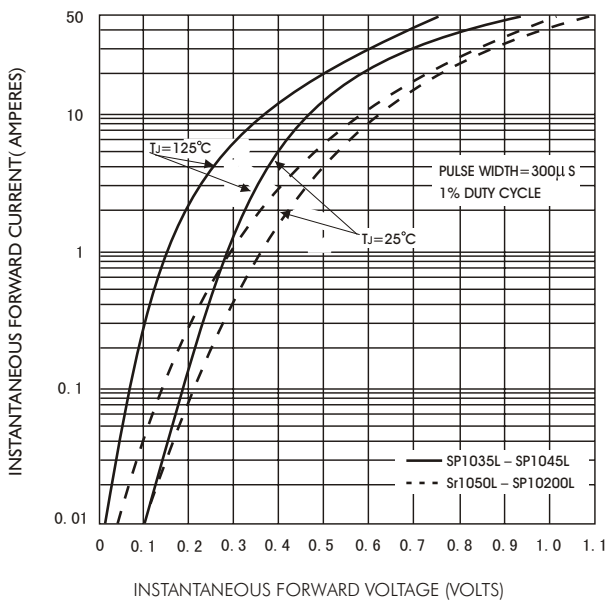


FIG.4-TYPICAL REVERSE CHARACTERISTICS

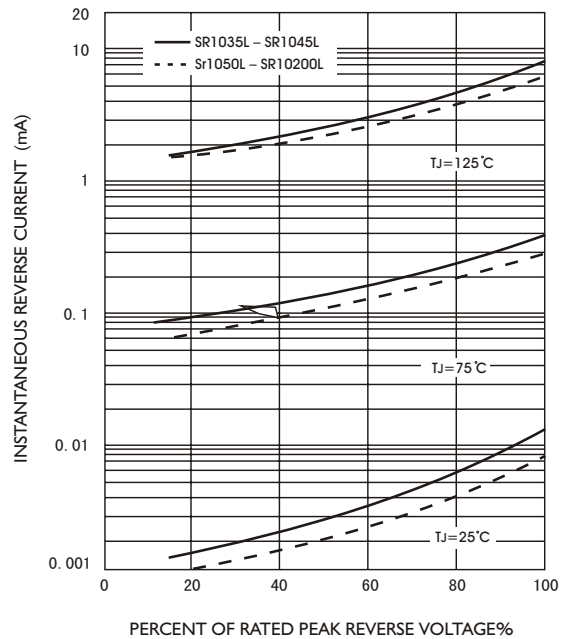


FIG.5-TYPICAL JUNCTION CAPACITANCE

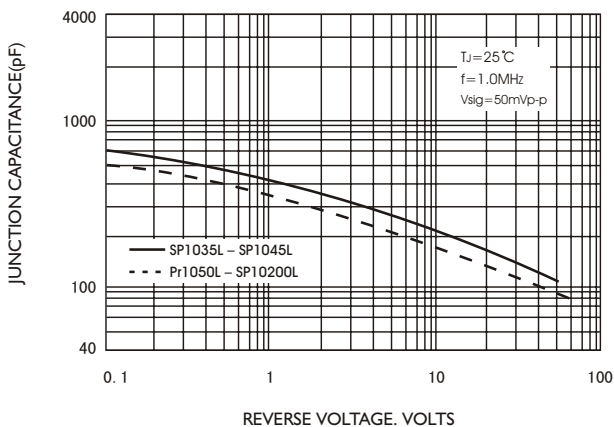


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

