

SILICON BRIDGE RECTIFIER

REVERSE VOLTAGE : 35 --- 200 V
CURRENT: 15.0A

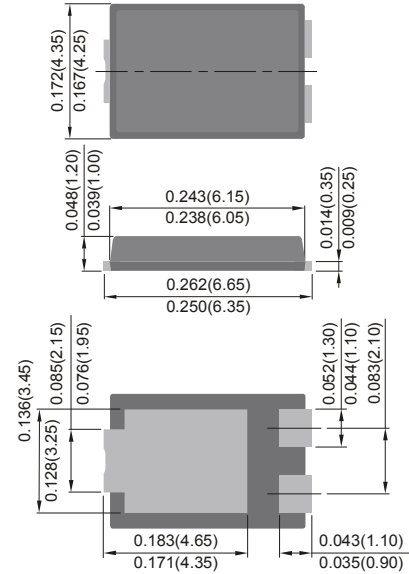
Features

- 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 1535L	SP 1545L	SP 1550L	SP 1560L	SP 15100L	SP 15150L	SP 15200L	Units
Maximum repetitive peak reverse voltage	V _{RRM}	35	45	50	60	100	150	200	Volts
Maximum RMS voltage	V _{RMS}	25	32	35	42	70	105	140	Volts
Maximum DC blocking voltage	V _{DC}	35	45	50	60	100	150	200	Volts
Maximum average forward rectified current See Fig. 1	I _(AV)	15.0							Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	150.0							Amps
Maximum instantaneous forward voltage at 15 A	V _F	0.50		0.55		0.70	0.80	0.85	Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	T _c = 25°C	0.3							mA
	T _c = 125°C	30		50					
Typical thermal resistance (Note 2)	R _{θJC}	3.0							°C/W
Operating junction temperature range	T _J	-65 to +150							°C
Storage temperature range	T _{STG}	-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

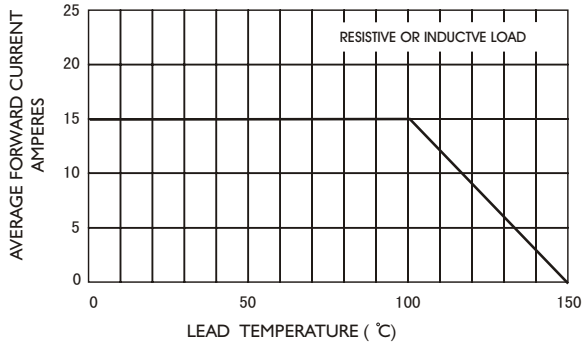


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

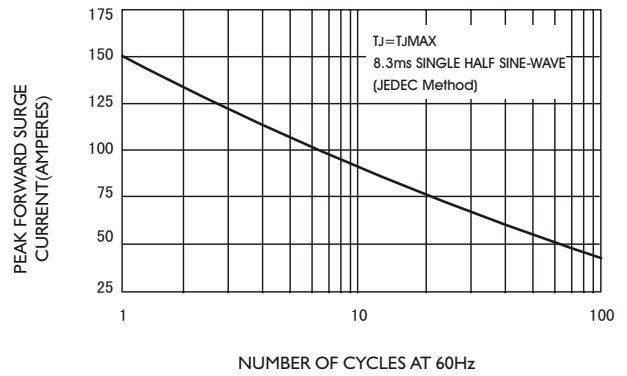


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

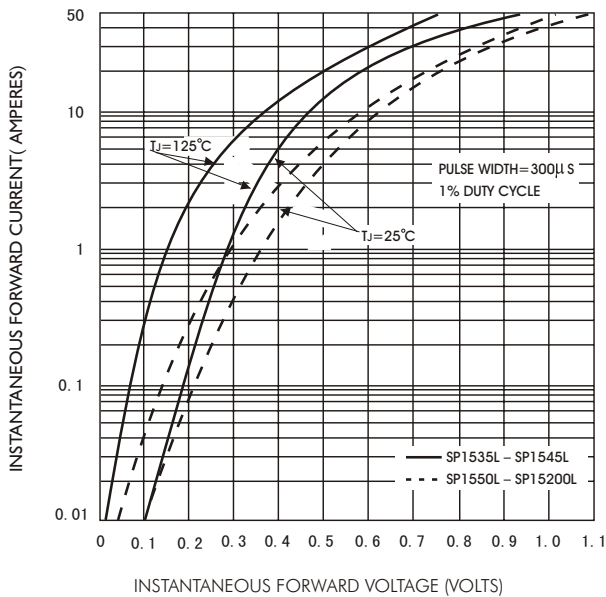


FIG.4-TYPICAL REVERSE CHARACTERISTICS

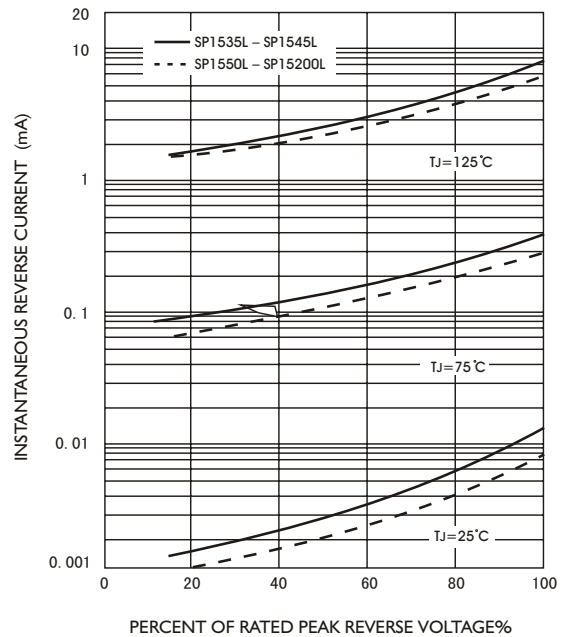


FIG.5-TYPICAL JUNCTION CAPACITANCE

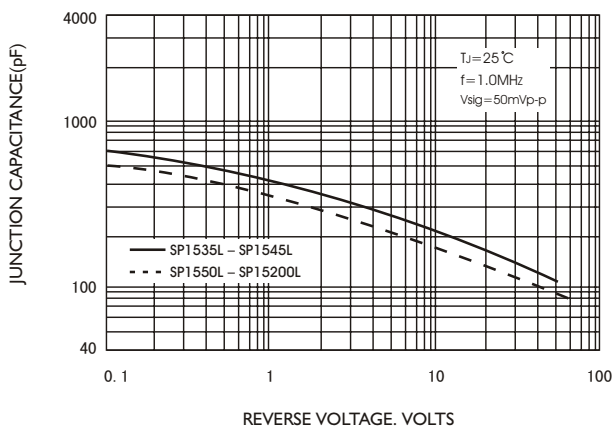


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

