

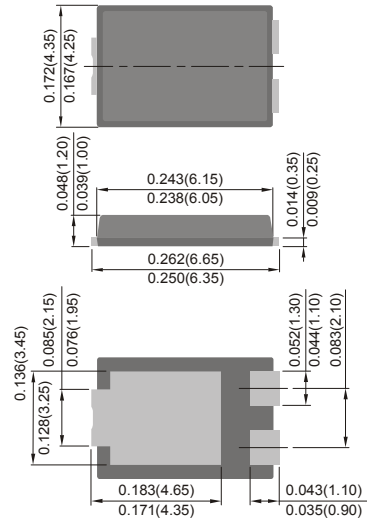
FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V
- Metal silicon junction ,majority carrier conduction
- Guard ring for overvoltage protection
- Low power loss ,high efficiency
- High current capability ,Low forward voltage drop
- High surge capability
- For use in low voltage ,high frequency inverters, free wheeling ,and polarity protection applications
- Dual rectifier construction
- 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

MECHANICAL DATA

- Case: JEDEC TO-277 molded plastic body
- Terminals: Plated axial leads, solderable per MIL-STD-750,method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight: 0.041ounce, 1.12 grams

TO-277



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 1535L	SP 1545L	SP 1550L	SP 1560L	SP 15100L	SP 15150	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)	I _R	0.3							mA
		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

FIG.1-FORWARD CURRENT DERATING CURVE

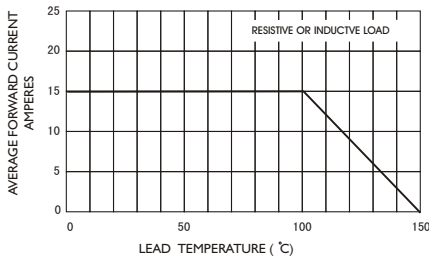


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

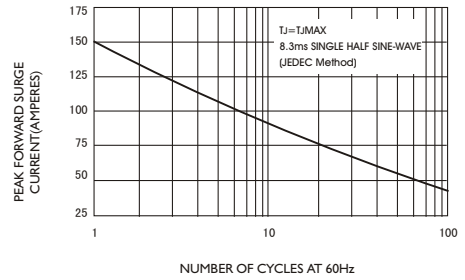


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

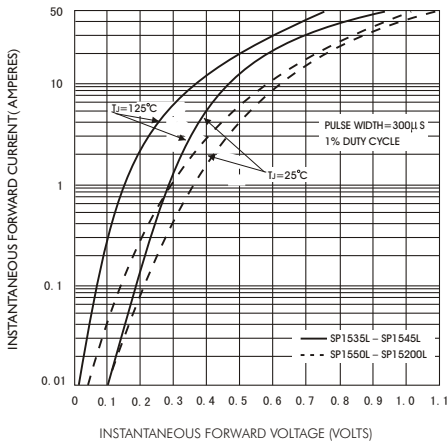


FIG.4-TYPICAL REVERSE CHARACTERISTICS

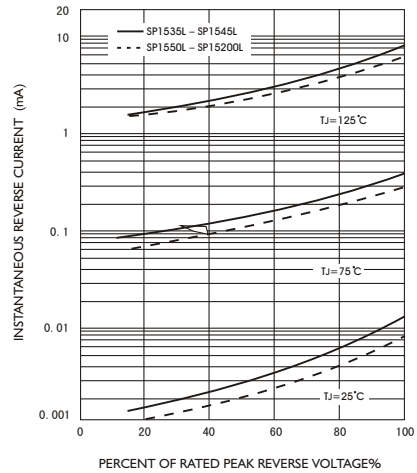


FIG.5-TYPICAL JUNCTION CAPACITANCE

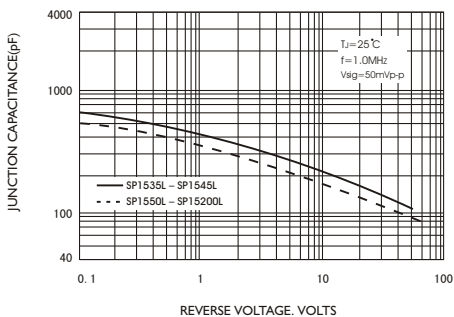


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

