

SILICON BRIDGE RECTIFIER

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

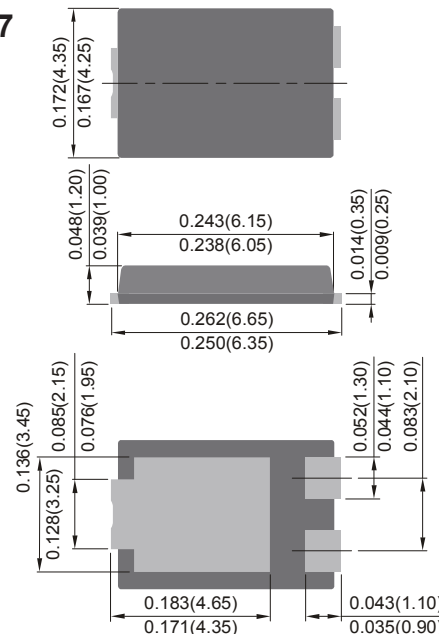
Features

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Guard ring for overvoltage protection
- Low power loss,high efficiency
- High current capability,low forward voltage drop
- High surge capability
- High temperature soldering guaranteed 260 °C/10 seconds at terminals

Mechanical Data

- Case : TO-277 Molded plastic body
- Terminals : Solder plated, solderable per MIL- STD-750, Method 2026
- Polarity : Color band denotes cathode end
- 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	ST 10100L	ST 10150	ST 10200L	Units
Maximum repetitive peak reverse voltage		VRRM	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)	10.0							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	0.45	0.55		0.70	0.80	0.85		Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	T _c = 25°C	I _R	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

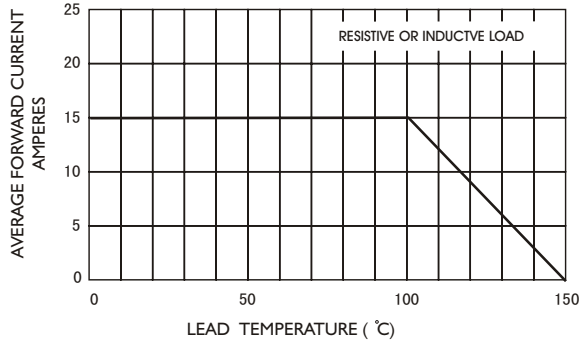


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

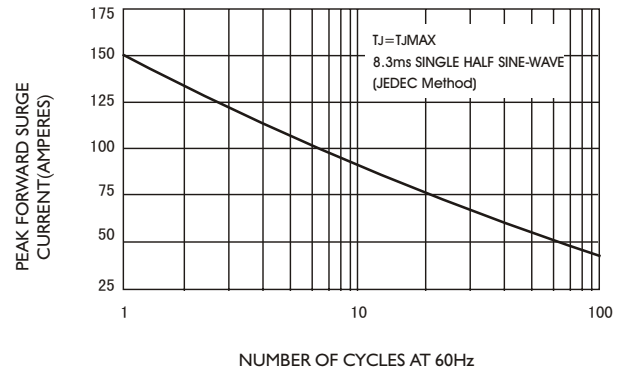


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

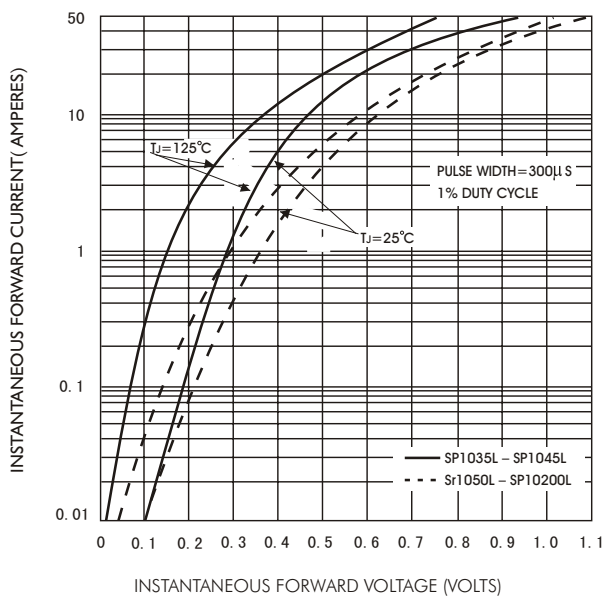


FIG.4-TYPICAL REVERSE CHARACTERISTICS

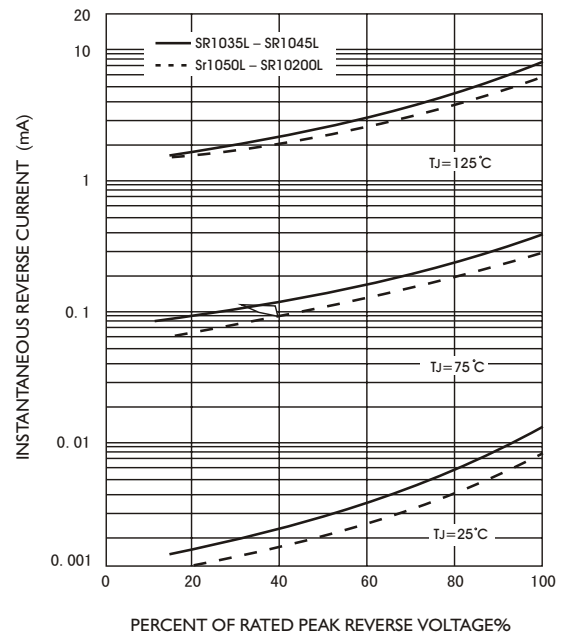


FIG.5-TYPICAL JUNCTION CAPACITANCE

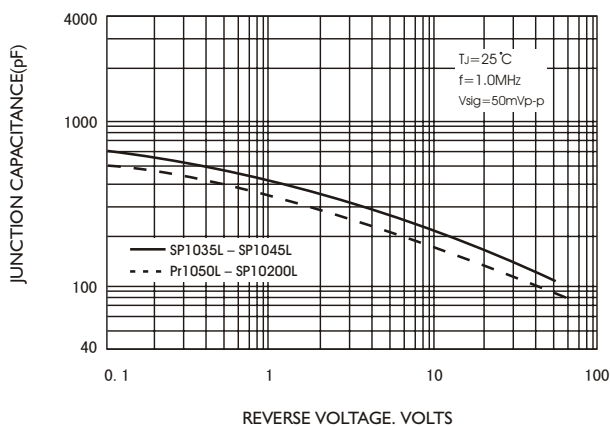


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

