

LOW VF SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

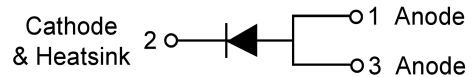
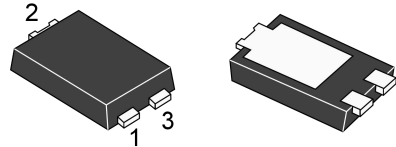
Features

- Schottky Barrier Chip
- High Thermal Reliability
- Patented Super Barrier Rectifier Technology
- High Forward Surge Capability
- Ultra Low Power Loss, High Efficiency
- Excellent High Temperature Stability
- Plastic material-UL flammability 94V-0

Mechanical Data

- Case: TO-277B, molded plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Mounting Position: Any
- Marking: Type Number
- Lead Free: For RoHS/Lead Free Version

TO-277B



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	SB 1020	SB 1030	SB 1045	SB 1050	SB 1060	SB 1080	SB 10100	SB 10150	SB 10200	Units
Maximum repetitive peak reverse voltage		VRRM	20	30	45	50	60	80	100	150	200	Volts
Maximum RMS voltage		VRMS	14	21	31	35	42	56	70	105	140	Volts
Maximum DC blocking voltage		VDC	20	30	45	50	60	80	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 10.0 A(Note 1)		VF	0.48			0.62		0.72		0.85		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

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FIG.1-FORWARD CURRENT DERATING CURVE

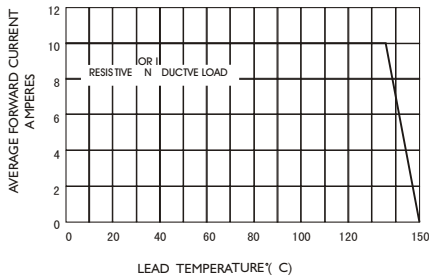


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

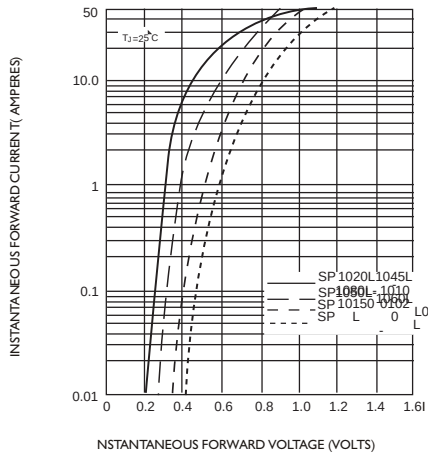


FIG.5-TYPICAL JUNCTION CAPACITANCE

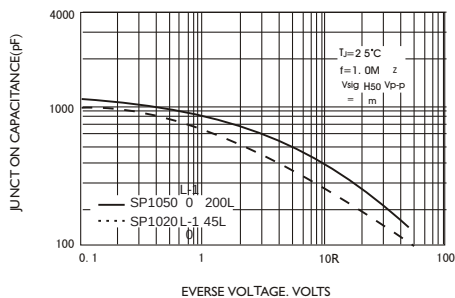


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

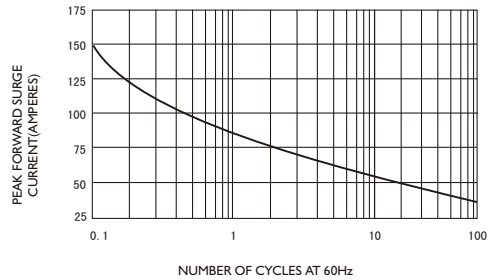


FIG.4-TYPICAL REVERSE CHARACTERISTICS

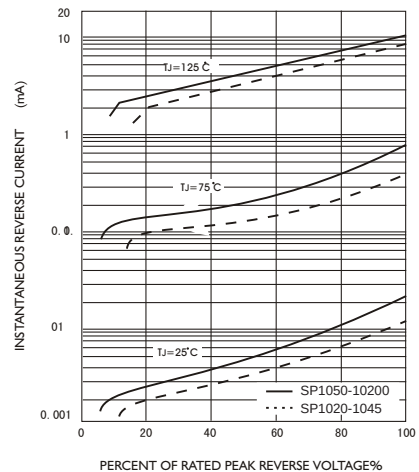
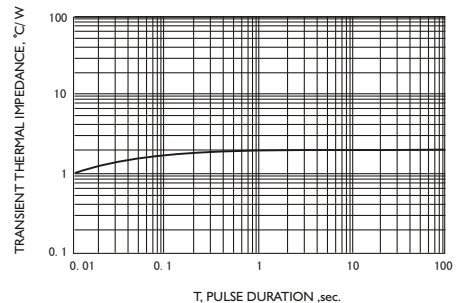
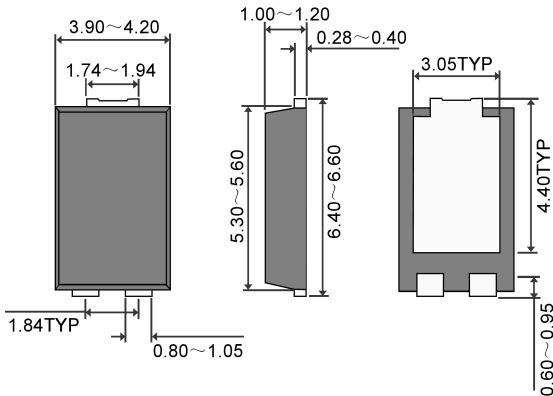


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

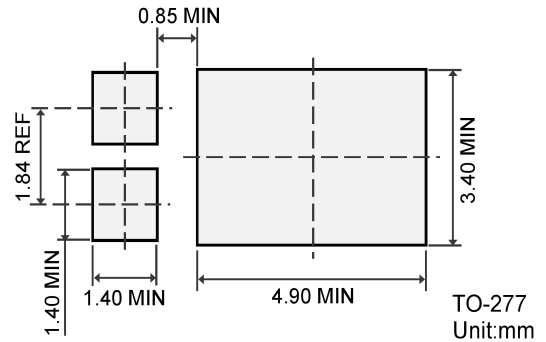


Package Outline Dimensions



TO-277
Unit:mm

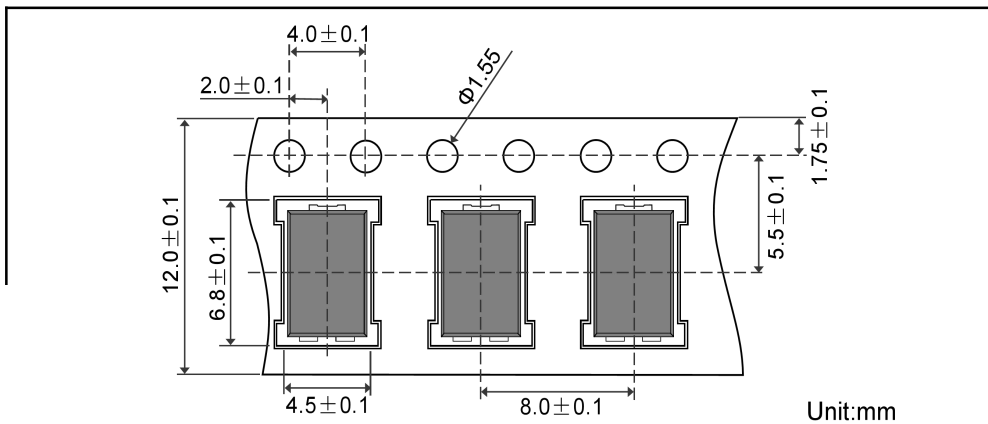
Suggested Solder Pad Layout



TO-277
Unit:mm

Packing Information

Packaging	Package	Reel Quantity	Reel Size	Tape Size
Reel	TO-277B	5000 pcs	13'	12 mm



Unit:mm