



# SP1045L THRU SP10200L

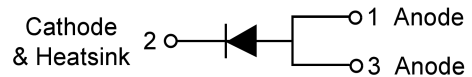
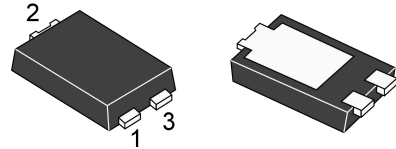
## Features

- Schottky Barrier Chip
- High Thermal Reliability
- Patented Super Barrier Rectifier Technology
- High Forward Surge Capability
- Ultra Fow 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



(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 1020L	SP 1030L	SP 1045L	SP 1050L	SP 1060L	SP 1080L	SP 10100L	SP 10150L	SP 10200L	Units
Maximum repetitive peak reverse voltage	$V_{RRM}$	20	30	45	50	60	80	100	150	200	Volts
Maximum RMS voltage	$V_{RMS}$	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)	$I_{FSM}$	150.0									Amps
Maximum instantaneous forward voltage at 10.0 A(Note 1)	$V_F$	0.48			0.62		0.72		0.85		Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	$T_a = 25^\circ C$	0.2									mA
	$T_a = 125^\circ C$	15			50						
Typical thermal resistance (Note 2)	$R_{\theta JC}$	2.5									°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  $\mu$  s pulse width,1% duty cycle  
2.Thermal resistance from junction to case



# SP1045L THRU SP10200L

FIG.1-FORWARD CURRENT DERATING CURVE

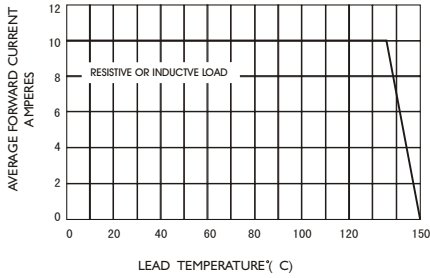


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

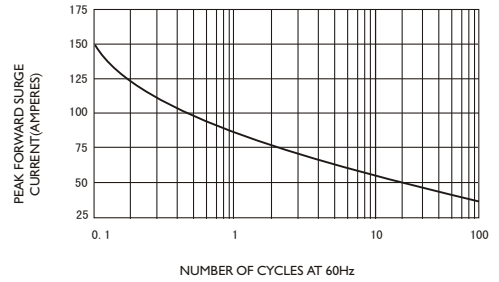


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

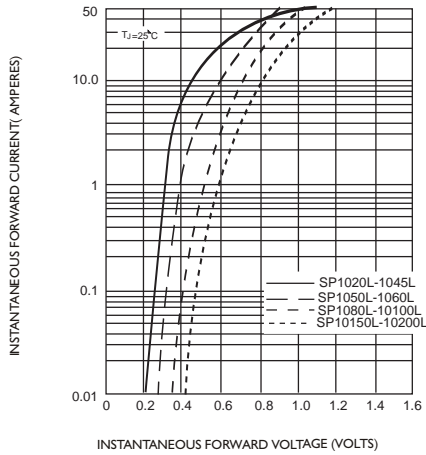


FIG.4-TYPICAL REVERSE CHARACTERISTICS

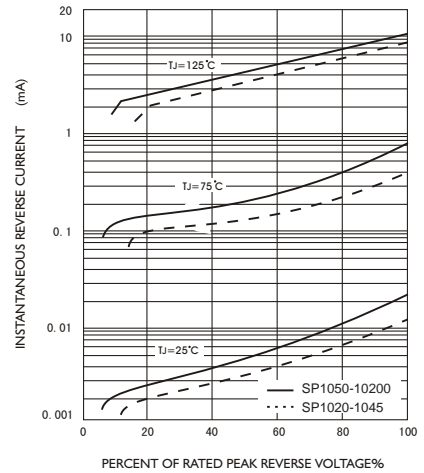


FIG.5-TYPICAL JUNCTION CAPACITANCE

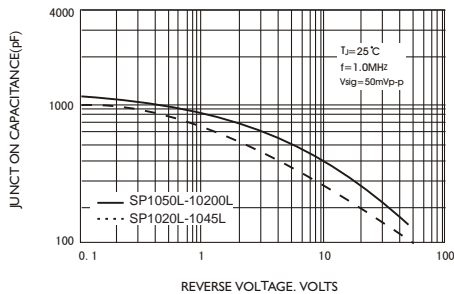
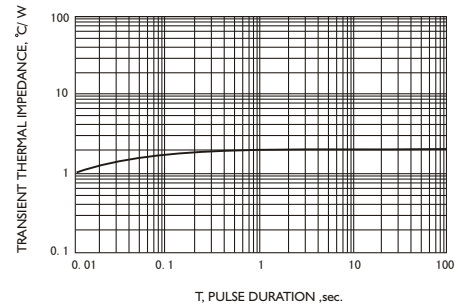


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

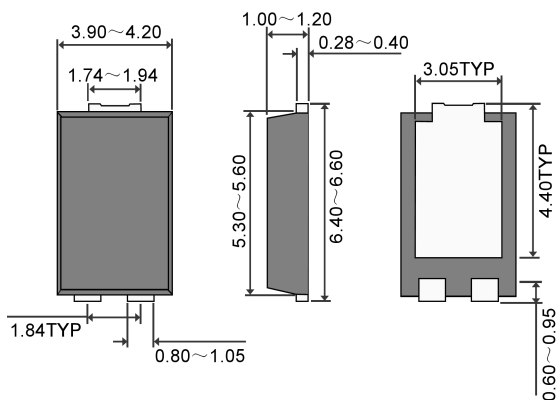




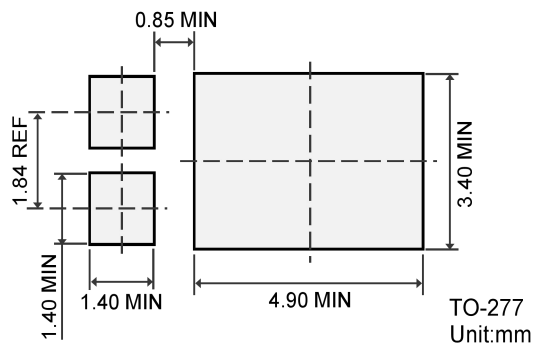
# SP1045L THRU SP10200L

## Package Outline Dimensions

## Suggested Solder Pad Layout



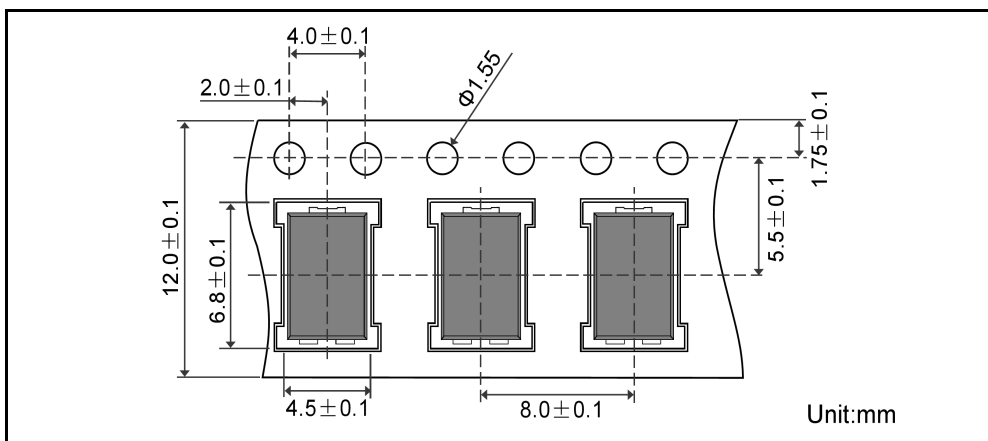
TO-277  
Unit:mm



TO-277  
Unit:mm

## Packing Information

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



Unit:mm