

**PS1580LT THRU PS15120LT**

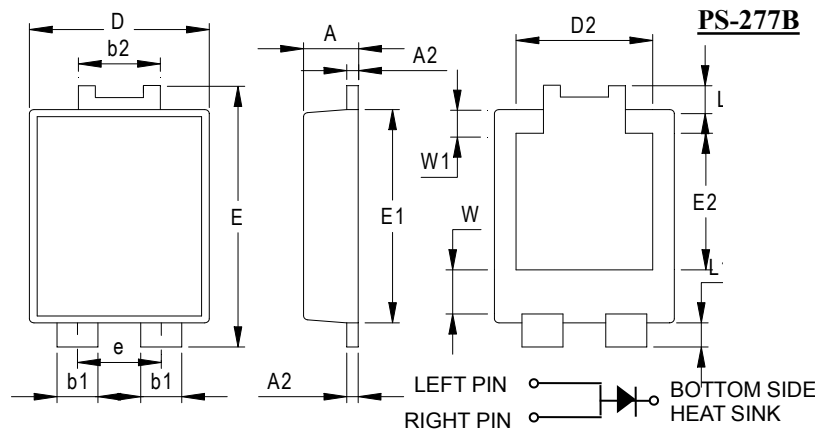
**15.0AMPS. SCHOTTKY BARRIER RECTIFIERS**

**FEATURE**

- . For surface mounted application
- . High current capability
- . Low forward voltage drop
- . Low power loss, high efficiency
- . High surge current capability
- . High temperature soldering guaranteed:  
250°C/10 seconds at terminals.

**MECHANICAL DATA**

- . Terminal: Solder plated
- . Case: Molded with UL-94 Class V-0 recognized  
Flame Retardant Epoxy



NO	Dimensions	NO	Dimensions
A	1.20±0.1	e	1.84Typ
A2	0.25±0.05	E1	5.3±0.1
b1	0.9±0.1	E2	3.3±0.2
b2	1.8±0.1	L	0.6±0.1
D	3.95±0.1	L1	0.6±0.1
D2	3.00Typ	W	1.3±0.2
E	6.5±0.1	W1	0.8±0.15
<b>All Dimensions in mm</b>			

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

Type Number	SYM BOL	PS1580LT	PS15100LT	PS15120LT	units
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	80	100	120	V
Maximum RMS Voltage	$V_{RMS}$	56	70	84	V
Maximum DC blocking Voltage	$V_{DC}$	80	100	120	V
Average Forward Rectified Output Current	$I_{F(AV)}$	15.0			A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	200.0			A
Maximum Instantaneous Forward Voltage at 2.0A DC	$V_F$	@T <sub>A</sub> =25°C	0.43	0.45	V
		@T <sub>A</sub> =100°C	0.33	0.35	
Maximum Instantaneous Forward Voltage at 15.0A DC	$V_F$	@T <sub>A</sub> =25°C	0.60	0.65	V
		@T <sub>A</sub> =100°C	0.55	0.60	
Maximum DC Reverse Current at rated DC blocking voltage	$I_R$	@T <sub>A</sub> =25°C	0.1		mA
		@T <sub>A</sub> =100°C	10.0		
Typical Junction Capacitance (Note1)	$C_J$	600			pF
Typical Thermal Resistance (Note2)	$R_{(JC)}$	31			°C/W
Storage Temperature	$T_{STG}$	-55 to +150			°C
Operating Junction Temperature	$T_J$	-55 to +150			°C

**Note:**

1. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
2. Polyimide PCB, 2oz. Copper. Cathode pad dimensions 18.8mm x 14.4mm. Anode pad dimensions 5.6mm x 14.4mm.

**RATING AND CHARACTERISTIC CURVES (PS1580LT THRU PS15120LT)**

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

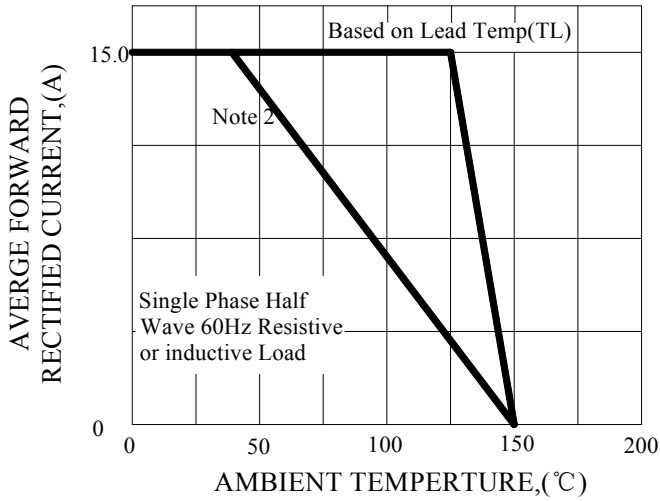


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

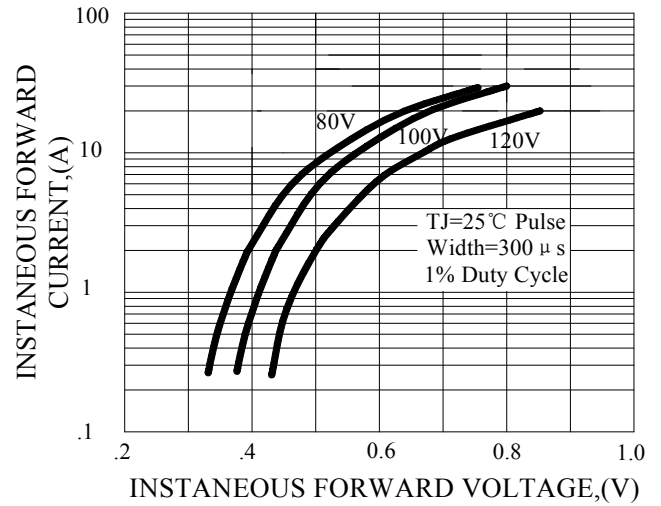


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

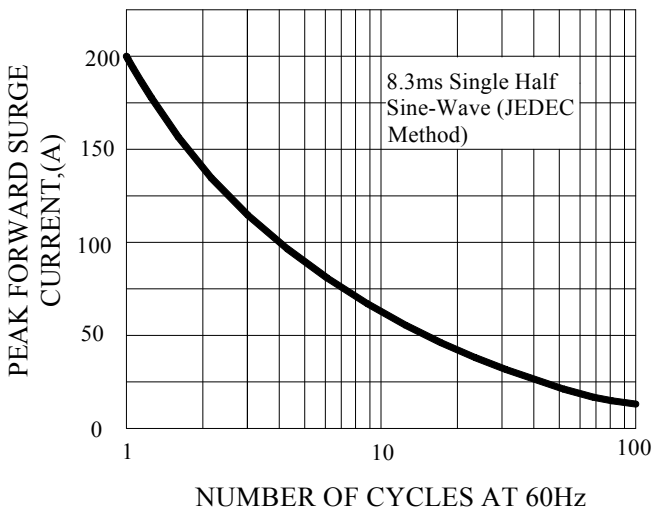


FIG.4-TYPICAL REVERSE CHARACTERISTICS

