

## PS860L

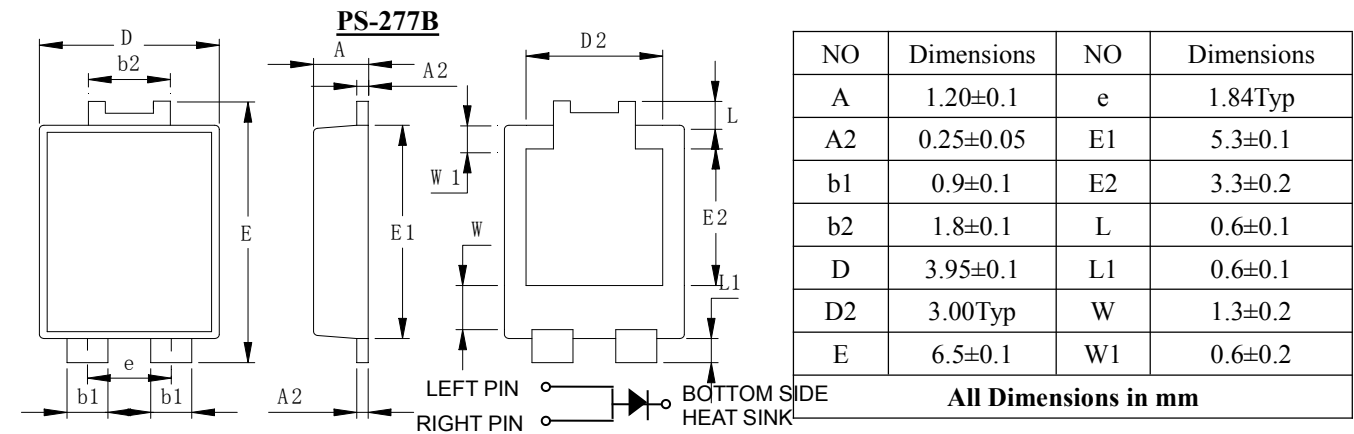
### 8.0AMPS. SCHOTTKY BARRIER RECTIFIERS

#### 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:  
260°C/10 seconds at terminals.

#### MECHANICAL DATA

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



Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%

#### MAXIMUM RATINGS (T<sub>C</sub>=25°C unless otherwise noted)

Parameter	Symbol	PS860L	Units
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	60	V
Maximum RMS Voltage	$V_{RMS}$	42	V
Maximum DC blocking Voltage	$V_{DC}$	60	V
Average Forward Rectified Current at T <sub>L</sub> ≤ 100°C	$I_{F(AV)}$	8	A
Non-repetitive forward surge current, 8.3ms Half sine-wave	$I_{FSM}$	175	A
Typical Junction Capacitance (Note1)	$C_J$	600	pF
Operation Junction Temperature and Storage Temperature	$T_J, T_{STG}$	-55 to +150	°C

#### ELECTRICAL CHARACTERISTICS (T<sub>C</sub>=25°C unless otherwise noted)

Parameter	Symbol	Min	Typ	Max	Units
Instantaneous Forward voltage at 8A	$V_F$	@T <sub>J</sub> =25°C	0.48	0.52	V
		@T <sub>J</sub> =125°C	0.38	-----	
reverse current at rated DC blocking voltage	$I_R$	@T <sub>J</sub> =25°C	-----	0.2	mA
		@T <sub>J</sub> =125°C	-----	20.0	

#### THERMAL CHARACTERISTICS (T<sub>C</sub>=25°C unless otherwise noted)

Parameter	Symbol	PS860L	Units
Typical Thermal Resistance (Note2)	$R_{(JA)}$	45	°C/W
	$R_{(JC)}$	15	

#### Note:

1. T<sub>J</sub>=25°C, V<sub>R</sub> = 4V<sub>DC</sub>@1Mhz

2. Polyimide PCB, 2oz. Copper. Cathode pad dimensions 18.8\* 14.4\*1.6mm. Anode pad dimensions 5.6 x 14.4\*1.6mm.

RATING AND CHARACTERISTIC CURVES (PS860L)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

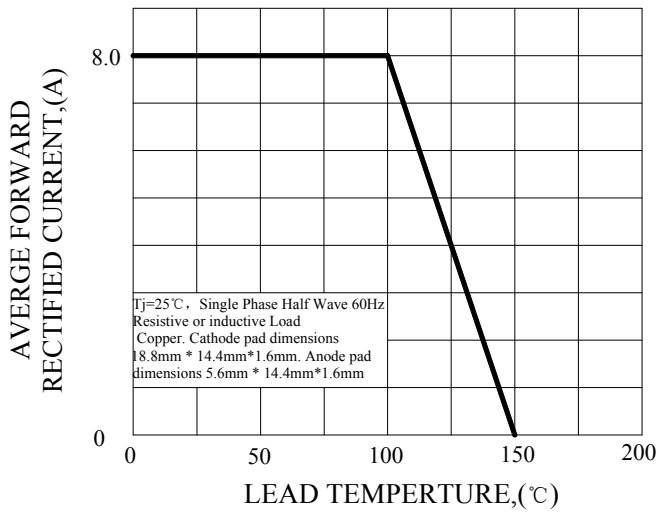


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

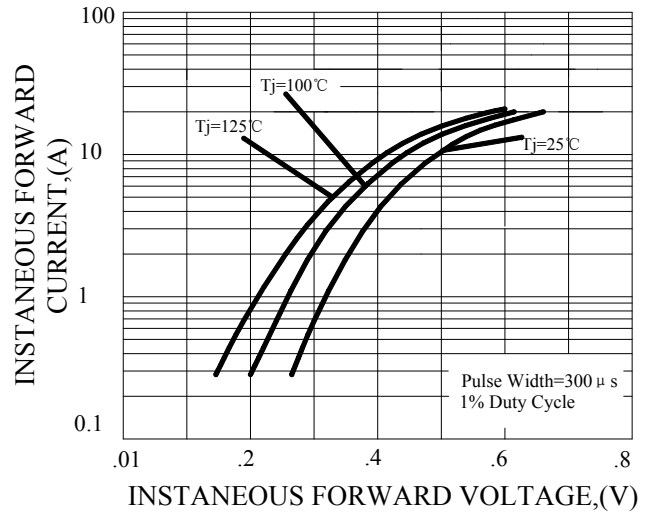


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

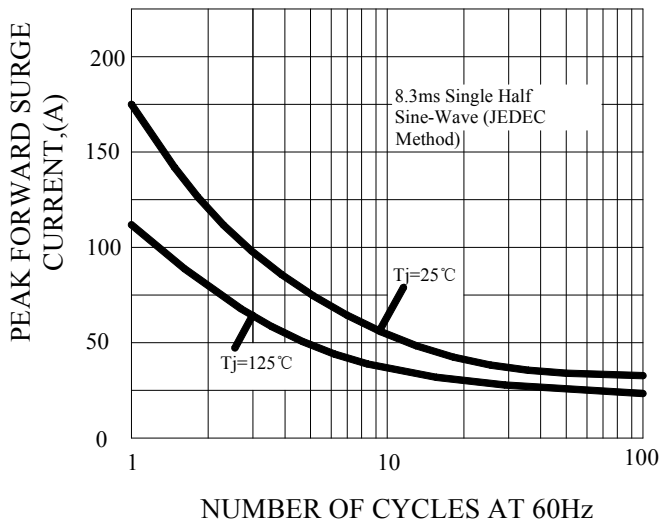


FIG.4-TYPICAL REVERSE CHARACTERISTICS

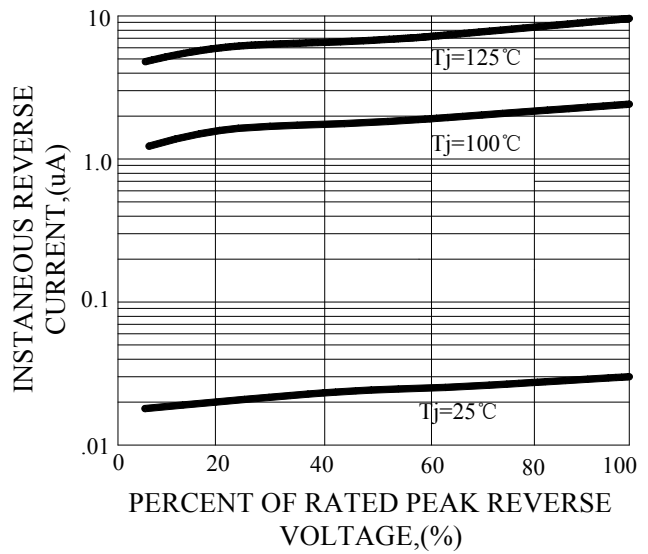
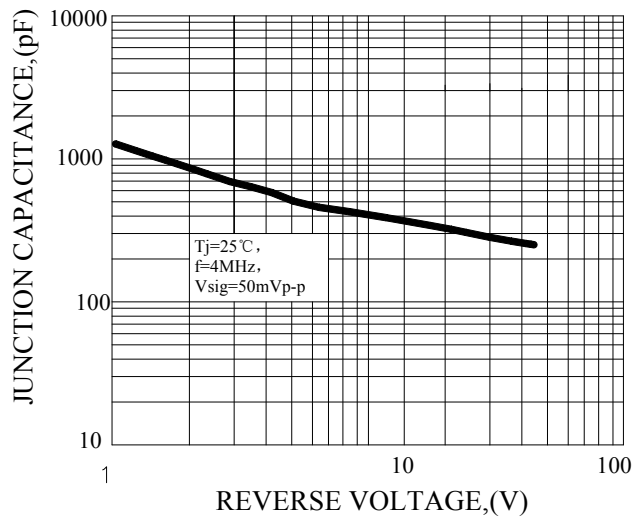
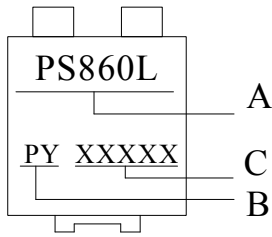


FIG.5-TYPICAL JUNCTION CAPACITANCE



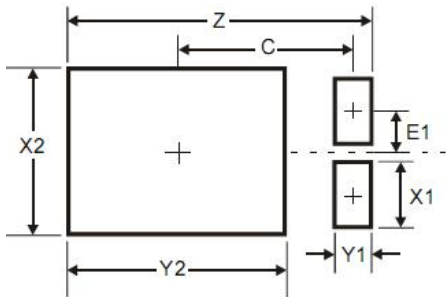
## Marking、 Pad Layout 、 MOQ and Packaging illustration

### 1、 Marking



SYMBOL	Explanation
<b>A</b>	<b>Product Name</b>
<b>B</b>	<b>Trademark</b>
<b>C</b>	<b>Date Code</b>

### 2、 Suggested Pad Layout

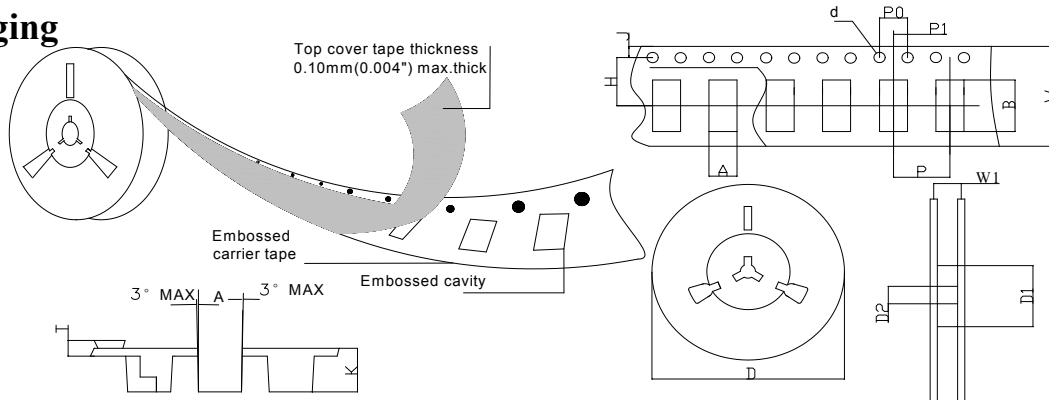


Dimensions	Value (in mm)
<b>Z</b>	<b>6.6</b>
<b>X1</b>	<b>1.4</b>
<b>X2</b>	<b>3.6</b>
<b>Y1</b>	<b>0.8</b>
<b>Y2</b>	<b>4.7</b>
<b>C</b>	<b>3.87</b>
<b>E1</b>	<b>0.9</b>

### 3、 MOQ

3000pcs / Tape & Reel

### 4、 Packaging



SPECIFICATIONS mm(inch)		PACKAGE	SPECIFICATIONS mm(inch)		PACKAGE
ITEM	SYM BOL	PS-277B	ITEM	SYM BOL	PS-277B
Carrier width	A	4.45(0.175)Max	Carrier depth	K	1.60(0.063)Typ
Carrier length	B	7.0(0.276)Max	Punch hole pitch	P	8.00(0.315)Typ
Sprocket hole	d	ø1.55(0.061)Typ	Sprocket hole pitch	P0	4.00(0.157)Typ
Reel outer diameter	D	330.0(13.0)Typ	Embossment center	P1	2.00(0.079)Typ
Reel inner diameter	D1	74.0(2.913)Min	Overall tape thickness	T	0.25(0.010)Typ
Feed hole diameter	D2	13.0(0.512)Typ	Tape width	W	16.0(0.630)Typ
Sprocket hole position	J	1.75(0.069)Typ	Reel width	W1	16.5(0.650)Min
Punch hole position	H	7.50(0.295)Typ			