

Plastic-Encapsulate Diodes Schottky Rectifier

Features

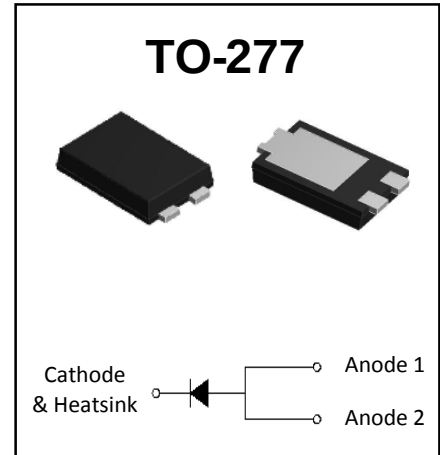
- I_o :15.0A
- V_{RRM} :50.0V
- High surge current capability
- Low V_f

Applications

- Rectifier

Marking

- SP1550L



Limiting Values (Absolute Maximum Rating)

Item	Symbol	Conditions	Min.	Typ.	Max.	Unit
Repetitive Peak Reverse Voltage	V_{RRM}		50	-	-	V
Maximum RMS Voltage	V_{RMS}		35	-	-	V
Average Forward Current	$I_{F(AV)}$	60Hz Half-sine wave, Resistance load, $T_L=125^{\circ}C$	-	15	-	A
Surge(Non-repetitive)Forward Current	I_{FSM}	60Hz Half-sine wave,1 cycle, $T_a=25^{\circ}C$	-	-	300	A
Junction Temperature	T_J		-55~+150			$^{\circ}C$
Storage Temperature	T_{STG}		-55~+150			$^{\circ}C$

Electrical Characteristics ($T_a=25^{\circ}C$ Unless otherwise specified)

Item	Symbol	Test Condition		Min.	Typ.	Max.	Unit
Peak Forward Voltaage	V_F	$I_F=15A$	$T_a=25^{\circ}C$	-	0.48	0.55	V
			$T_a=125^{\circ}C$	-	0.45		
Peak Reverse Current	I_{RRM}	$V_{RM}=V_{RRM}$	$T_a=25^{\circ}C$	-	0.06	0.20	mA
			$T_a=125^{\circ}C$	-	20.0	50.0	
Thermal Resistance(Typical)	$R_{\theta J-A}$	Between junction and ambient			80		$^{\circ}C/W$
	$R_{\theta J-L}$	Between junction and lead			25		
Typical junction capacitance	C_J	4.0 V, 1 MHz			0.95		nF

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Typical Characteristics

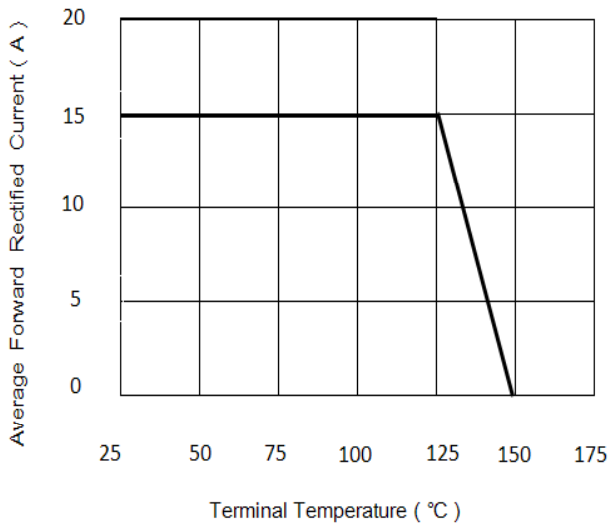


Figure 1. Forward Current Derating Curve

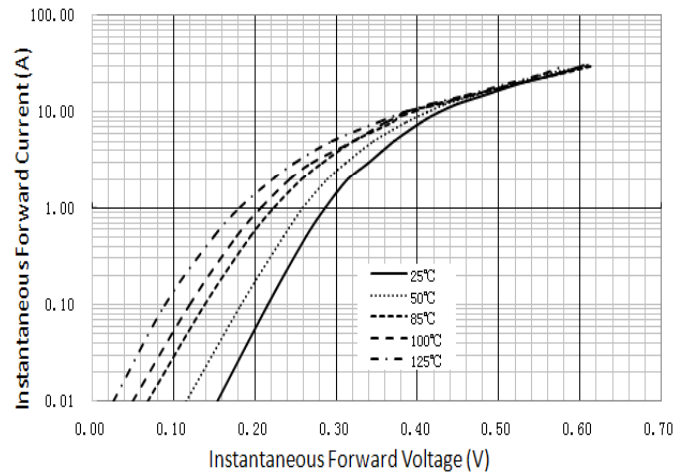


Figure 2. Typical Instantaneous Forward Characteristics

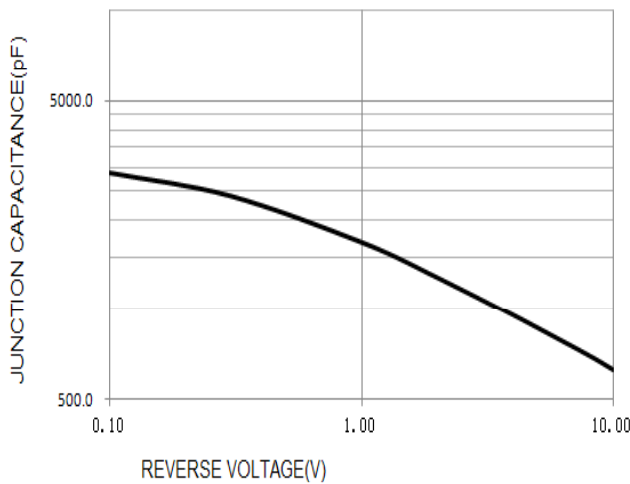


Figure 3. Typical Junction Capacitance

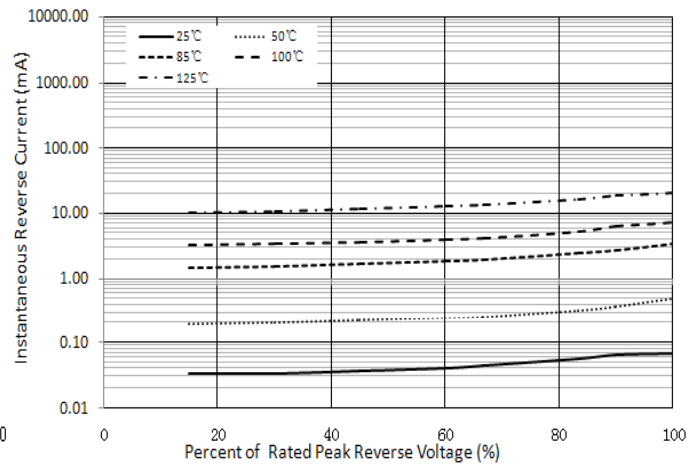


Figure 4. Typical Reverse Characteristics

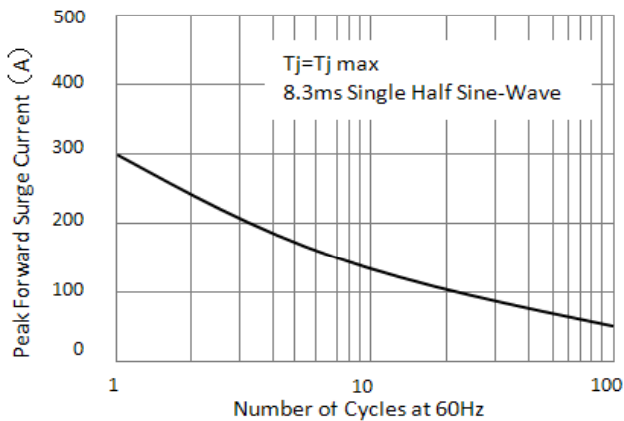
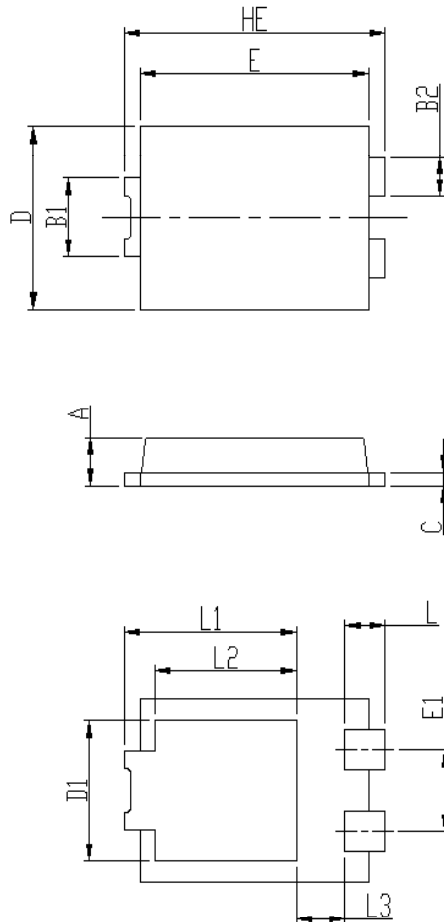


Figure 5. Maximum Non-Repetitive Peak Forward Surge Current

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TO- 277 Package Outline Dimensions



DIM	Unit: mm		Unit: inch	
	MIN	MAX	MIN	MAX
HE	6.4	6.6	0.252	0.260
E	5.6	5.8	0.220	0.228
D	4.1	4.3	0.161	0.169
B1	1.7	1.9	0.067	0.075
B2	0.8	1	0.031	0.039
A	1.05	1.2	0.041	0.047
C	0.3	0.4	0.012	0.016
L	0.85	1.1	0.033	0.043
L1	4.2	4.4	0.165	0.173
L2	3.52 Typ.		0.139 Typ.	
L3	1.1	1.4	0.043	0.055
D1	3	3.3	0.118	0.130
E1	1.86 Typ.		0.073 Typ.	

TO- 277 Suggested Pad Layout

