



YEA SHIN TECHNOLOGY CO., LTD

YS15T100L

15A Surface Mount Schottky Barrier Rectifiers



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

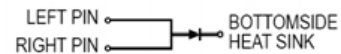
Mechanical Data

- Case: TO-277, 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

Applications

- Switching mode power supply applications
- Portable equipment battery applications
- High frequency rectification
- DC/DC converter
- Polarity protection applications

Pin Configuration



Maximum Ratings and Electrical Characteristics @T_A =25 °C unless otherwise specified

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

Parameter	Symbol	YS15T100L		Unit
Peak Repetitive Reverse Voltage	V _{RRM}	100		V
Working Peak Reverse Voltage	V _{RWM}			
DC blocking voltage	V _{DC}			
RMS Rectified Voltage	V _{R(RMS)}	70		V
Average Rectified Output Current (Note1)	IF(AV)	15.0		A
Non-Repetitive Peak Forward Surge Single Half Sine-Wave Superimposed on rated load(JEDEC Method) (Note2)	IFSM	300		A
I ² t Rating for Fusing (t < 8.3ms)	I ² t	373.5		A ² s
Forward Voltage Drop T _A =25 °C @IF=1A T _A =25 °C @IF=5A T _A =25 °C @IF=15A	V _{FM}	Typ. 0.37 0.45 0.56	Max. - - 0.61	V
Peak Reverse Curent At Rated DC Blocking Voltage	I _R	T _A =25°C T _A =100°C	0.3 15	mA
Typical Thermal Resistance Junctionto Ambient	R _{θJA} R _{θJL}	110 3.5		°C/W
Operating junction temperature range	T _J	-55 to +150		°C
storage temperature range	T _{STG}	-55 to +150		°C

Note:1.Valid Provided that are kept at ambient temperature at a distance of 9.5mm from the case.

2.Fr-4pcb,2oz.Copper,minimum recommend pad layout .18.8mm×14.4.Anode pad dimensions 5.6mm×14.4mm.

DEVICE CHARACTERISTICS

YS15T100L

Fig.1 Forward Current Derating Curve

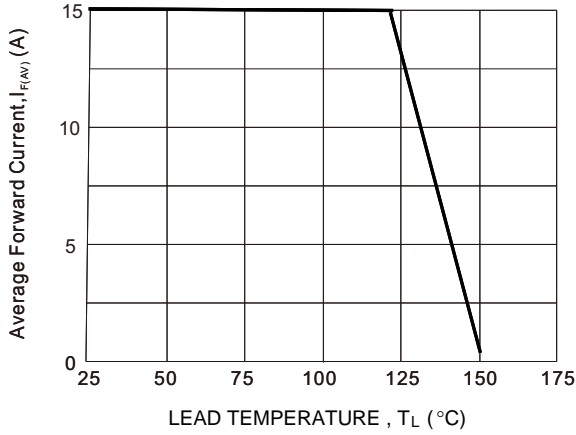


Fig. 2 Typical Forward Characteristics

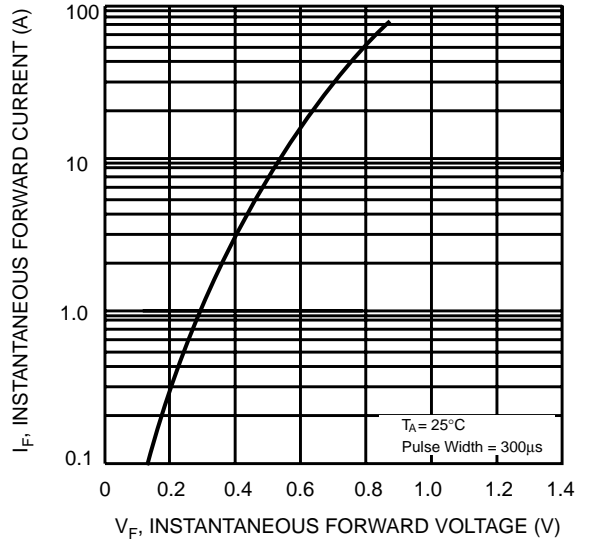


Fig.3 Maximum Peak Forward Surge Current

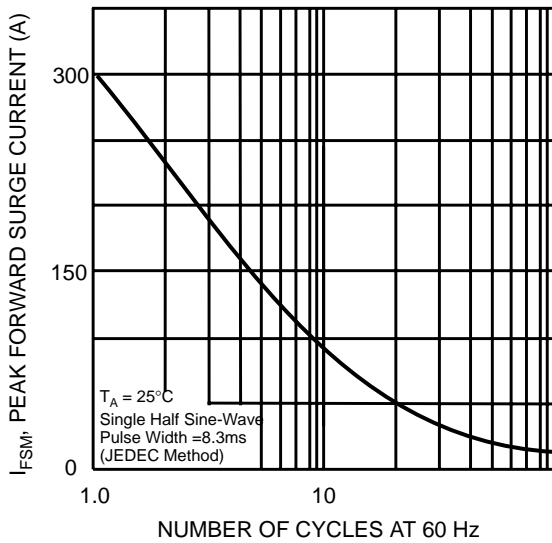
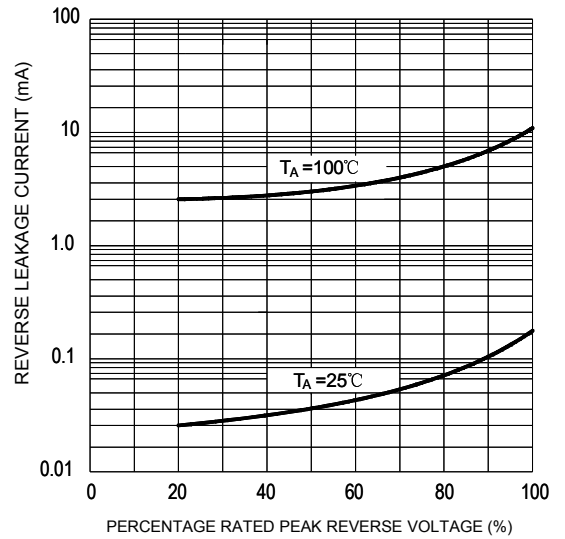


Fig.4 Typical Reverse Characteristics



PACKAGE OUTLINE & DIMENSIONS

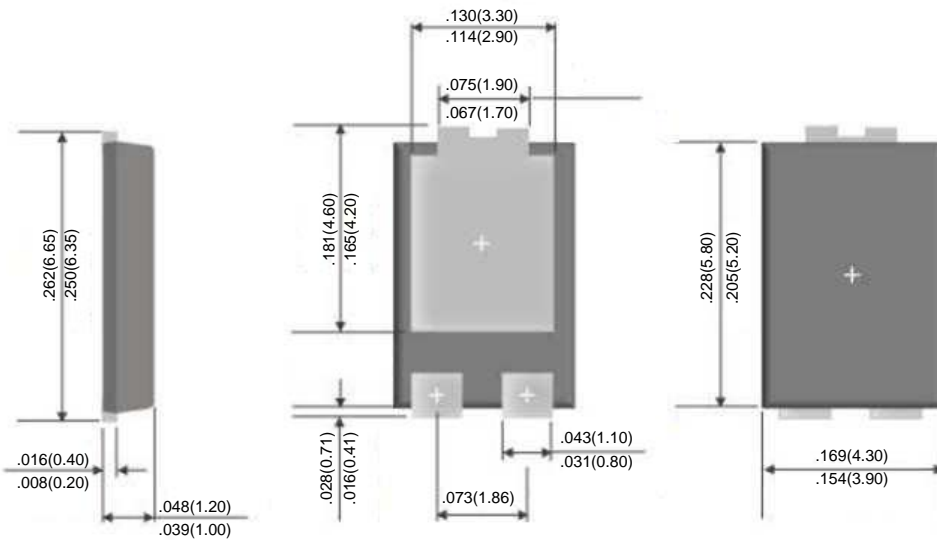
YS15T100L

PACKAGE AND SUGGESTED PAD LAYOUT DIMENSION

TO-277

Outline drawing and Dimension

unit: inch (mm)



FOOT PRINT RECOMMENDATION	MARKING CODE						
<p>Foot print recommendation diagram showing dimensions in mm:</p> <ul style="list-style-type: none"> Package width: 0.173 (4.40) Package height: 0.138 (3.50) Lead width: 0.038 (0.97) Lead thickness: 0.055 (1.40) Lead width: 0.083 (2.10) Lead thickness: 0.046 (1.18) <p>unit: mm</p>	<p>Marking code diagram showing the logo, device name 15T100L, and date code XXXX on the package.</p> <table border="1" data-bbox="794 1709 1447 1798"> <tr> <td>YS</td> <td>15T100L</td> <td>xxxx</td> </tr> <tr> <td>Logo</td> <td>Device name</td> <td>Date Code</td> </tr> </table>	YS	15T100L	xxxx	Logo	Device name	Date Code
YS	15T100L	xxxx					
Logo	Device name	Date Code					