**Features**

- ✧ High current capability, low forward voltage
- ✧ Excellent high temperature stability
- ✧ Low power loss, and high efficiency
- ✧ High forward surge capability
- ✧ RoHS compliant, and Halogen free
- ✧ AEC-Q101 qualified

Mechanical Data

- ✧ Case: TO-277 small outline plastic package
- ✧ Terminal: Matte tin plated, solderable per MIL-STD-750, Method 2026
- ✧ Molding Compound Flammability Rating:UL 94V-0
- ✧ High temperature soldering guaranteed: 260°C /10second
- ✧ Packed with FRP substrate and epoxy underfilled

Applications

- ✧ Switching mode power supply applications
- ✧ Portable equipment battery applications
- ✧ High frequency rectification
- ✧ DC/DC converter
- ✧ Designed as bypass diodes for solar panels

Ordering Information

- ✧ Device:YS15S50PSL
- ✧ Package: TO-277
- ✧ Marking: 15S50PSL
- ✧ Material: Halogen free
- ✧ Packing: Tape & 13" Reel
- ✧ Quantity per reel: 5,000pcs

Pin Configuration**Maximum Ratings** @ T_A = 25°C unless otherwise specified

Symbol	Parameter	Value	Units
V _{RRM}	Repetitive Peak Reverse Voltage	50	V
I _{F(AV)}	Average Forward Current	15	A
I _{FSM}	Peak Forward Surge Current, 8.3ms single half sine-wave	250	A
T _J & T _{STG}	Junction and Storage Temperature	-50~+150	°C
R _{θJC}	Typical Thermal Resistance, Junction to Case	20	°C/W

Electrical Characteristics @ T_A = 25°C unless otherwise specified

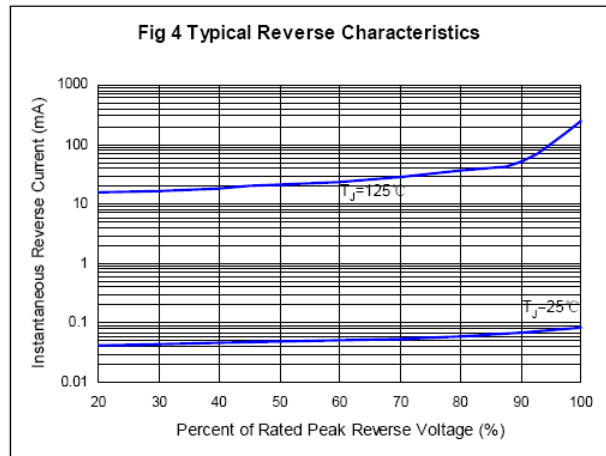
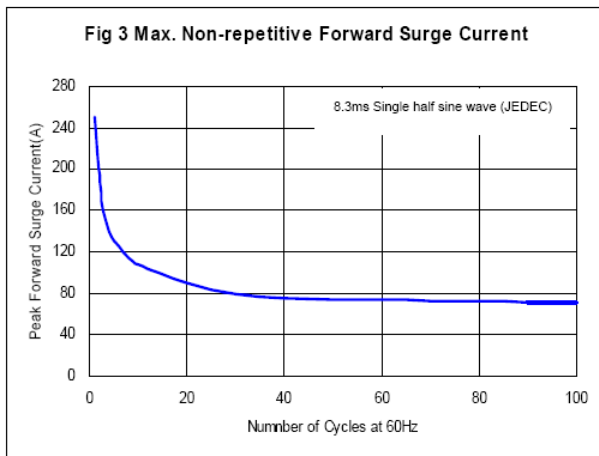
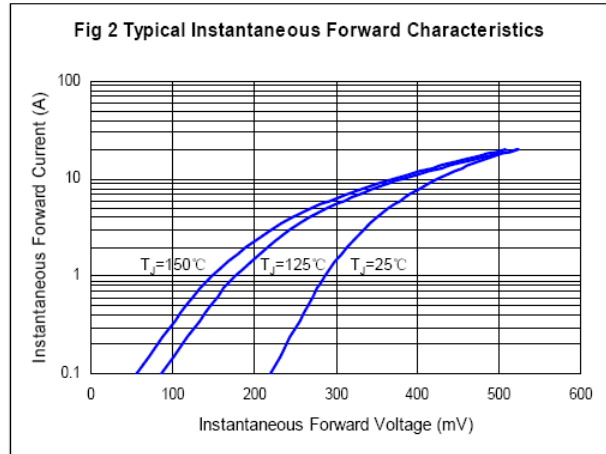
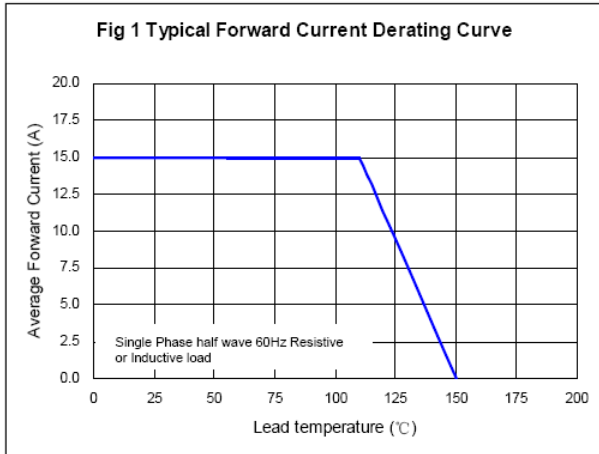
Symbol	Parameter	Test Condition	Min	Typ	Max	Units
V _F	Forward Voltage	I _F = 3A @ 25°C		0.33	0.36	V
		I _F = 10A @ 25°C		0.41	0.46	V
		I _F = 15A @ 25°C		0.45	0.49	V
		I _F = 3A @ 125°C		0.24		V
		I _F = 10A @ 125°C		0.37		V
		I _F = 15A @ 125°C		0.41		V
V _R	Reverse Breakdown Voltage	I _R = 0.5mA	50			V
I _R	Reverse Leakage Current	V _R = 50V			150	μA

Note 1: Polyimide PCB, 2oz. copper. Cathode pad dimensions 18.8x14.4mm. Anode pad dimensions 5.6x14.4mm

DEVICE CHARACTERISTICS

YS15S50PSL-A

Electrical characteristic curves



PACKAGE OUTLINE AND DIMENSIONS

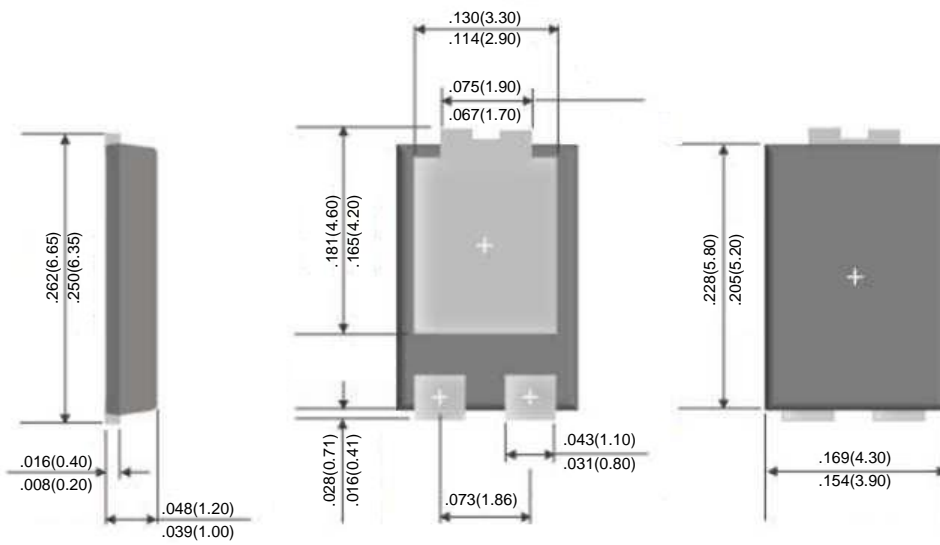
YS15S50PSL-A

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"> Height: 0.138 (3.50) Width: 0.173 (4.40) Top Margin: 0.038 (0.97) Bottom Margin: 0.046 (1.18) Pad Spacing: 0.083 (2.10) Pad Width: 0.055 (1.40) <p>unit: mm</p>	<div style="text-align: center;"> <p>YS 15S50PSL XXXX</p> </div> <table border="1" style="width: 100%; text-align: center;"> <tr> <td>YS</td> <td>15S50PSL</td> <td>XXXX</td> </tr> <tr> <td>Logo</td> <td>Device name</td> <td>Date code</td> </tr> </table>	YS	15S50PSL	XXXX	Logo	Device name	Date code
YS	15S50PSL	XXXX					
Logo	Device name	Date code					