**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

**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<sub>A</sub> = 25°C unless otherwise specified

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

**Electrical Characteristics** @ T<sub>A</sub> = 25°C unless otherwise specified

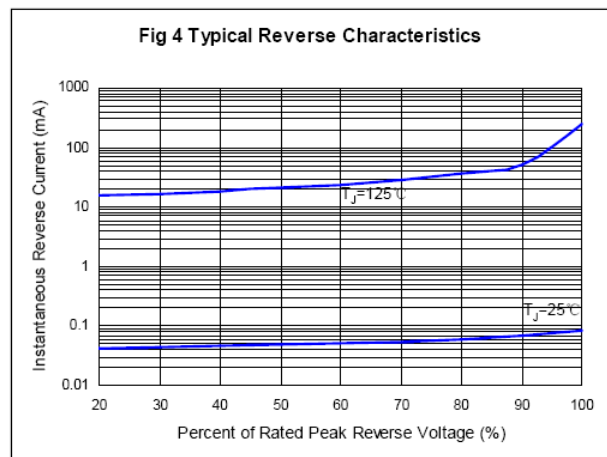
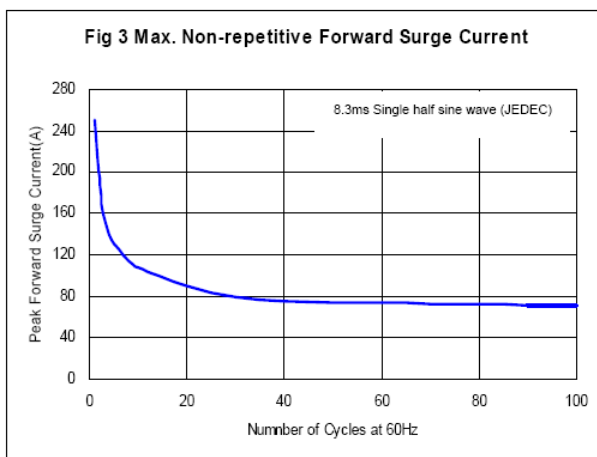
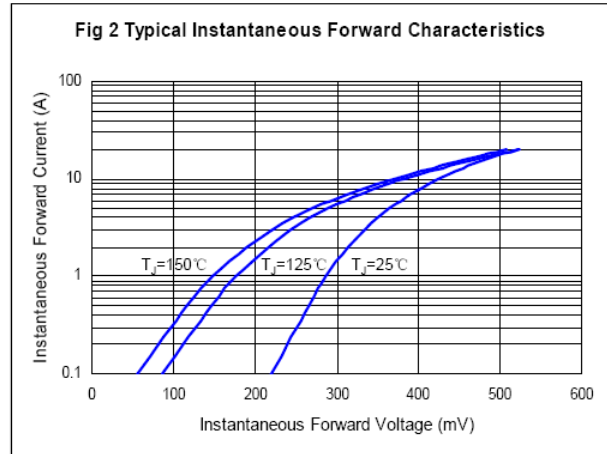
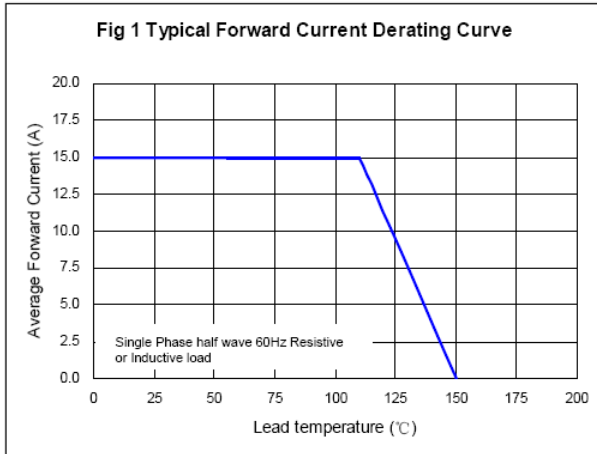
Symbol	Parameter	Test Condition	Min	Typ	Max	Units
V <sub>F</sub>	Forward Voltage	I <sub>F</sub> = 3A @ 25°C		0.33	0.36	V
		I <sub>F</sub> = 10A @ 25°C		0.41	0.46	V
		I <sub>F</sub> = 15A @ 25°C		0.45	0.49	V
		I <sub>F</sub> = 3A @ 125°C		0.24		V
		I <sub>F</sub> = 10A @ 125°C		0.37		V
		I <sub>F</sub>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

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

# DEVICE CHARACTERISTICS

## YS15S50PSL

### Electrical characteristic curves



# PACKAGE OUTLINE AND DIMENSIONS

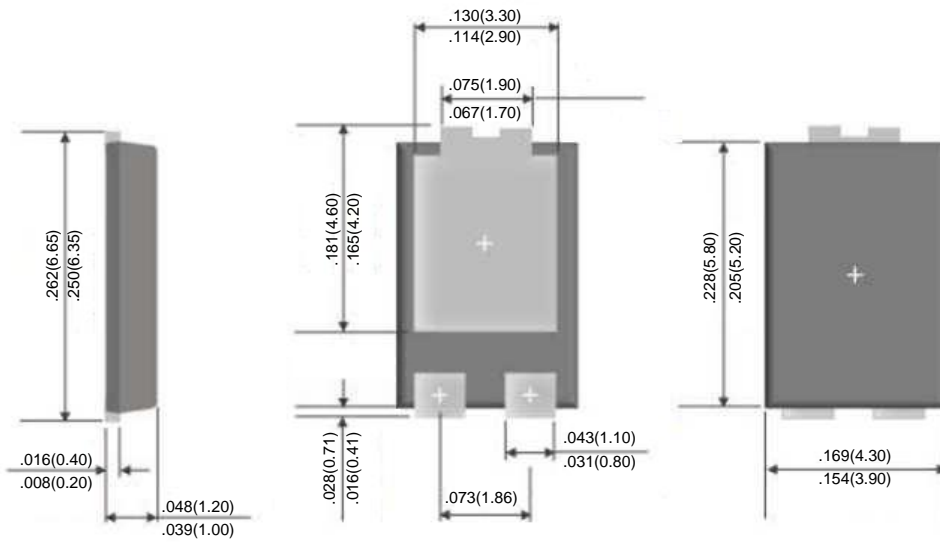
## YS15S50PSL

### 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"> <li>Height: 0.138 (3.50)</li> <li>Width: 0.173 (4.40)</li> <li>Top Pad Width: 0.038 (0.97)</li> <li>Bottom Pad Width: 0.046 (1.18)</li> <li>Bottom Pad Spacing: 0.083 (2.10)</li> <li>Bottom Pad Height: 0.055 (1.40)</li> </ul> <p>unit: mm</p>	<p>Marking code diagram showing the layout of the package markings:</p> <ul style="list-style-type: none"> <li>YS logo</li> <li>15S50PSL</li> <li>XXXX</li> </ul> <table border="1" data-bbox="802 1805 1449 1888"> <thead> <tr> <th>YS</th> <th>15S50PSL</th> <th>XXXX</th> </tr> </thead> <tbody> <tr> <td>Logo</td> <td>Device name</td> <td>Date code</td> </tr> </tbody> </table>	YS	15S50PSL	XXXX	Logo	Device name	Date code
YS	15S50PSL	XXXX					
Logo	Device name	Date code					