

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

Applications

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

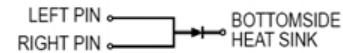
Mechanical Data

- Case: TO-277 small outline plastic package
- Terminal: Matte tin plated, solderable per MIL-STD-750, Method 2026
- Molding Compound Flammability Rating:UL94-0
- High temperature soldering guaranteed: 260°C /10second
- Packed with FRP substrate and epoxy underfilled

Ordering Information

- Device: YS15S50SL
- Package: TO-277
- Marking: 15S50SL
- Material: Halogen free
- Packing: Tape & 13" Reel
- Quantity per reel: 5,000pcs

Pin Configuration



Maximum Ratings @ TA = 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	320	A
T _J & T _{STG}	Junction and Storage Temperature	-50~+150	°C

Electrical Characteristics @ TA = 25°C unless otherwise specified

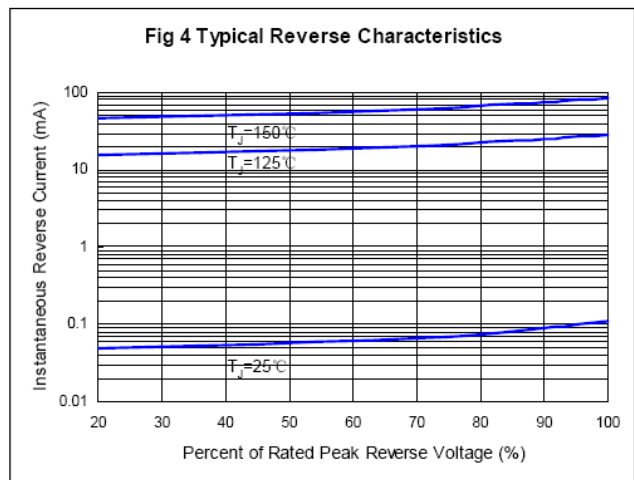
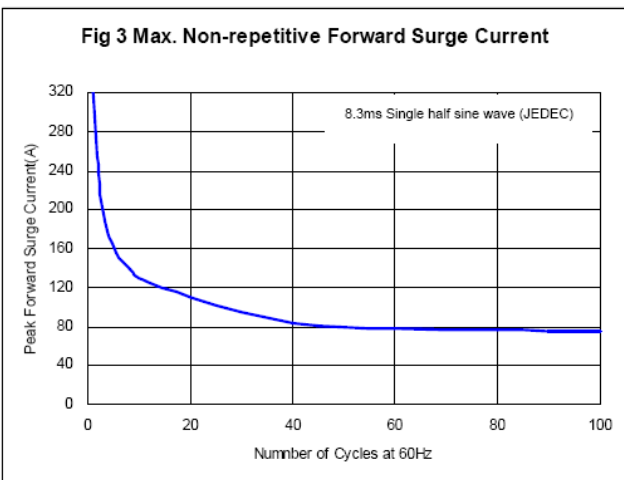
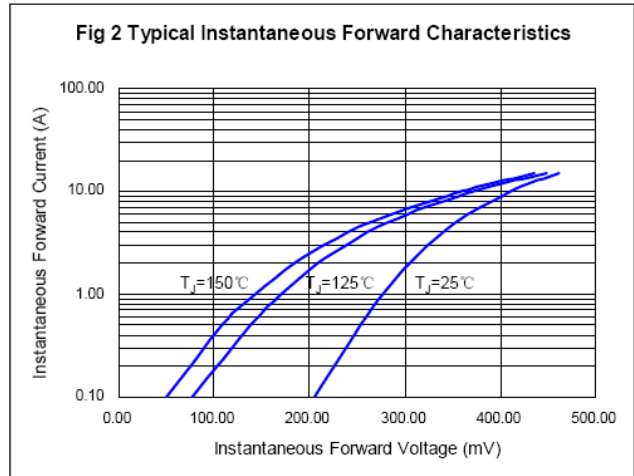
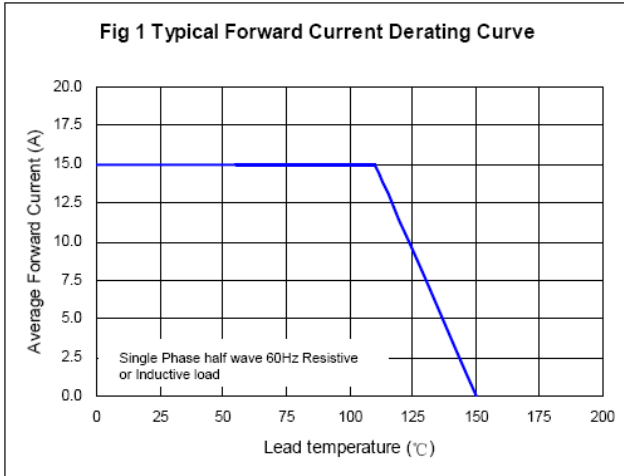
Symbol	Parameter	Test Condition	Min	Typ	Max	Units
V _F	Forward Voltage	I _F = 3A @ 25°C		0.33	0.36	V
		I _F = 10A @ 25°C		0.41	0.46	V
		I _F = 15A @ 25°C		0.46	0.51	V
		I _F = 3A @ 125°C		0.24		V
		I _F = 10A @ 125°C		0.37		V
		I _F = 15A @ 125°C		0.44		V
V _R	Reverse Breakdown Voltage	I _R = 0.5mA	50			V
I _R	Reverse Leakage Current	V _R = 50V			0.280	mA
C _J	Junction Capacitance	f=1MHz, V _R =4V		900		pF

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

DEVICE CHARACTERISTICS

YS15S50SL

Electrical characteristic curves



PACKAGE OUTLINE AND DIMENSIONS

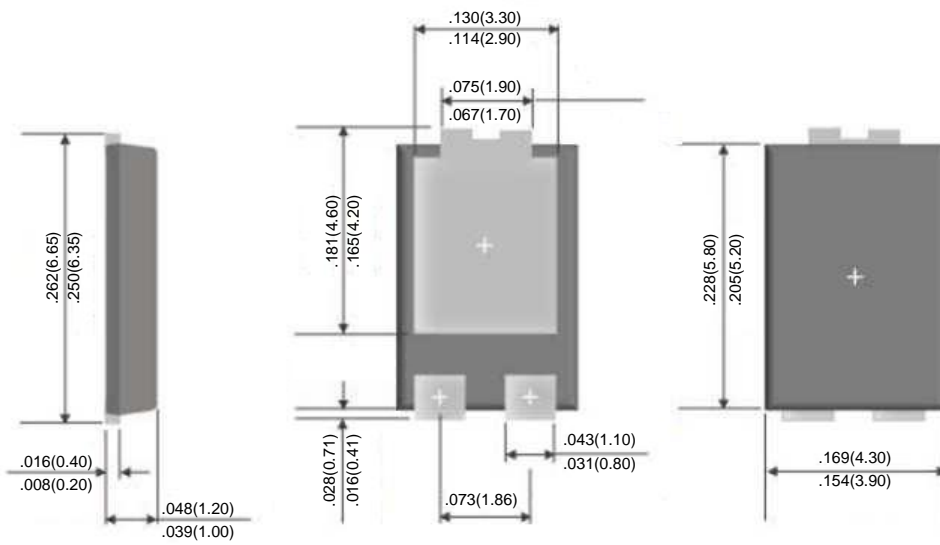
YS15S50SL

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 spacing: 0.055(1.40) Lead length: 0.083(2.10) Lead thickness: 0.046(1.18) <p>unit: mm</p>	<p>Marking code diagram showing the logo, device name 15S50SL, and date code XXXX on the package.</p> <table border="1" data-bbox="802 1805 1449 1888"> <thead> <tr> <th>YS</th> <th>15S50SL</th> <th>XXXX</th> </tr> </thead> <tbody> <tr> <td>Logo</td> <td>Device name</td> <td>Date code</td> </tr> </tbody> </table>	YS	15S50SL	XXXX	Logo	Device name	Date code
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