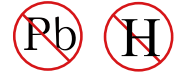




10A SURFACE MOUNT LOW VF SCHOTTKY BARRIER RECTIFIER

**Features**

- High current capability
- Ultra Low Forward Voltage Drop
- Low reverse current
- Low thermal resistance
- Excellent high temperature stability
- Low power loss and high efficiency
- High forward surge capability
- Low thermal resistance
- AEC-Q101 qualified

Mechanical Data

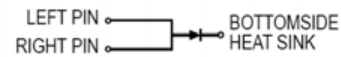
- TO-277 small outline plastic package
- Matte tin plated, solderable per MIL-STD-750, Method 2026, J-STD-002 and JESD 22-B102
- Molding Compound Flammability Rating:UL94-V0 Low power loss and high efficiency
- High temperature soldering guaranteed: 260°C 10second
- Packed with FRP substrate and epoxy underfilled
- Package Designed for Optimal automated circuit board assembly

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: YS10U45SL
- Package: TO-277
- Marking: 10U45SL
- 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	45	V
I _{F(AV)}	Average Forward Current	10	A
I _{FSM}	Peak Forward Surge Current, 8.3ms single half sine-wave	280	A
T _J & T _{STG}	Junction and Storage Temperature	-40~+150	°C

Electrical Characteristics @ T_A = 25°C unless otherwise specified

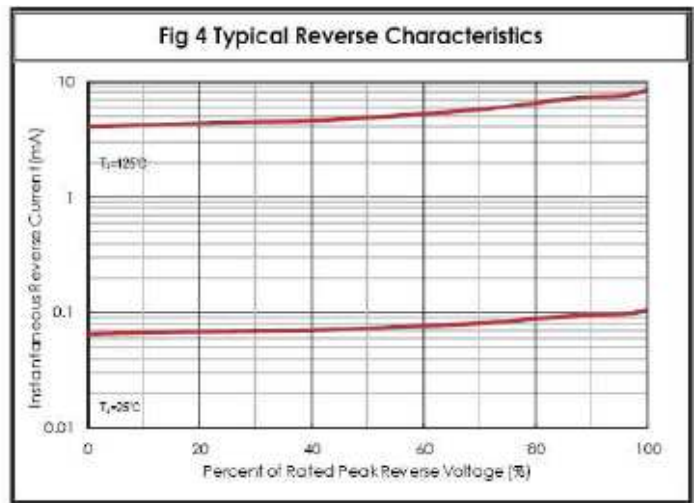
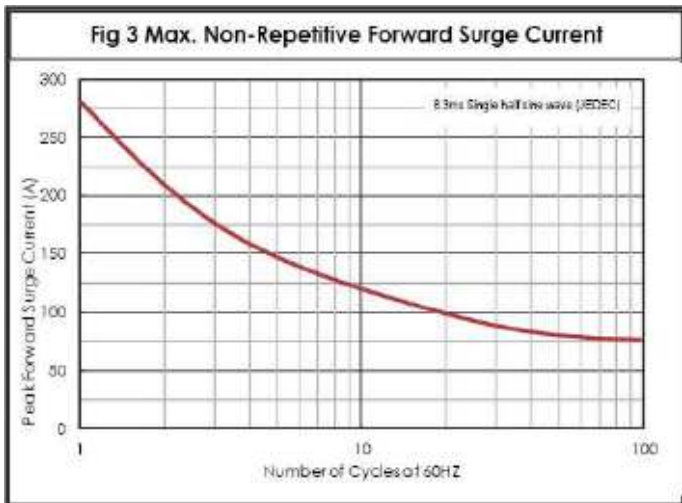
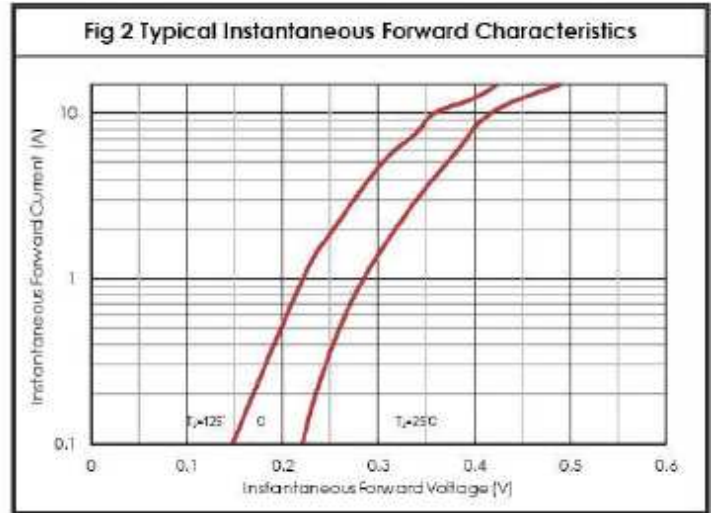
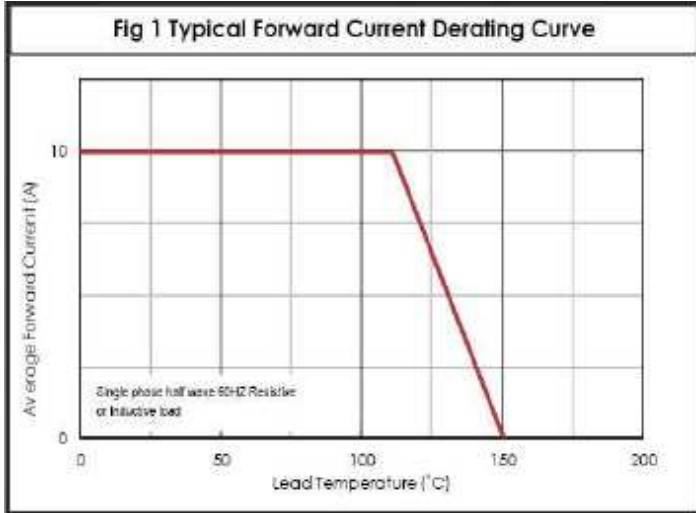
Symbol	Parameter	Test Condition	Min	Typ	Max	Units
V _F	Forward Voltage	I _F = 3A		0.34	0.36	V
		I _F = 8A		0.40	0.43	V
		I _F = 10A		0.42	0.44	V
I _R	Reverse Leakage Current	V _R = 45V			0.3	mA
C _J	Junction Capacitance	f=1MHz, V _R =4V		600		pF
R _{th(JA)}	Thermal Resistance (note 1)			31		°C/W

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

DEVICE CHARACTERISTICS

YS10U45SL-A

Electrical characteristic curves



PACKAGE OUTLINE AND DIMENSIONS

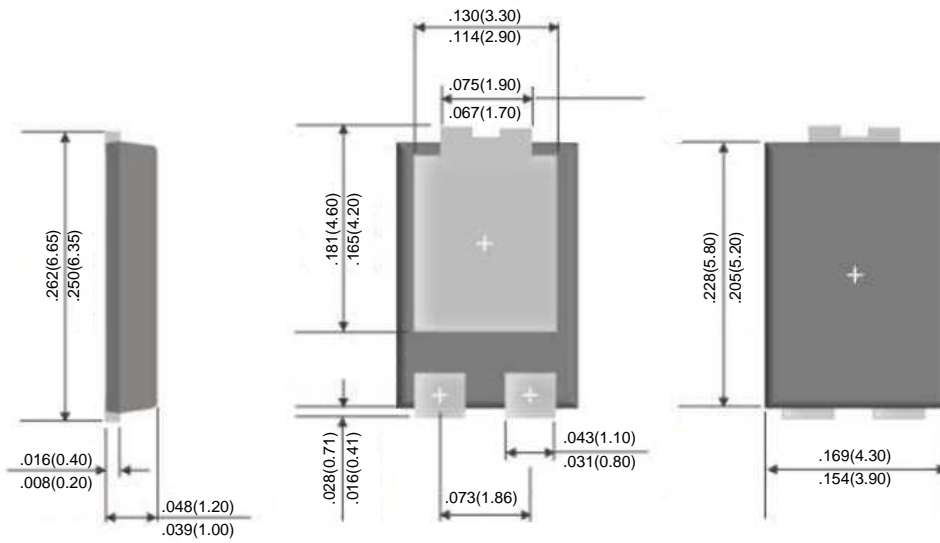
YS10U45SL-A

PACKAGE AND SUGGESTED PAD LAYOUT DIMENSION

TO-277

Outline drawing and Dimension

Unit:inch(mm)



FOOT PRINT RECOMMENDATION	MARKING CODE						
<p style="text-align: center;">unit: mm</p>	<table border="1" style="margin: 10px auto; border-collapse: collapse; text-align: center;"> <tr> <td style="padding: 2px;">YS</td> <td style="padding: 2px;">10U45SL</td> <td style="padding: 2px;">XXXX</td> </tr> <tr> <td style="padding: 2px;">Logo</td> <td style="padding: 2px;">Device name</td> <td style="padding: 2px;">Date code</td> </tr> </table>	YS	10U45SL	XXXX	Logo	Device name	Date code
YS	10U45SL	XXXX					
Logo	Device name	Date code					