



10.0A Surface Mount Schottky Barrier Rectifiers

**Features**

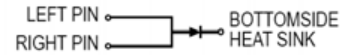
- Low forward voltage drop.
- Excellent high temperature stability.
- Fast switching capability.
- Halogen-free part.
- Lead free in compliance with EU ROHS.

Applications

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

Mechanical Data

- Case : TO-277, molded plastic
- Expyo : UL-94-V0 rated flame retardant.
- Lead : Solder plated, solderable per MIL-STD-750, Method 2026.
- Mounting Postition : Any.
- Weight : Approximated 0.09 grams.

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

Parameter	Conditions	Symbol	YS10L100SL	UNIT
Working Peak Reverse Voltage		V _{RWM}	100	V
Forward Rectified Current		I _O	10	A
Forward Surge Current	8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I _{FSM}	200	A
Peak Repetitive Reverse Surge Current	Pulse width 2us, 1000Hz, square wave at T _A 25°C, 10 cycles	I _{RRM}	1	A
Thermal Resistance	Junction to case	R _{BJC}	5	°C/W
	Junction to ambient	R _{9JA}	60	°C/W
Storage Temperature		T _{STG}	-55 ~ +150	°C
Operating Junction Temperature		T _J	-55 ~ +150	°C

Electrical Characteristics

Parameter	Conditions	Symbol	MIN.	TYP.	MAX.	UNIT
Forward Voltage Drop	I _F = 3A, T _J = 25°C	V _F		475		mV
	I _F = 10A, T _J = 25°C			655	700	
	I _F = 10A, T _J = 125°C			595		
Reverse Current	V _R = 100V, T _J = 25°C	I _R		10	100	uA
	V _R = 100V, T _J = 125°C			8	30	mA
Reverse Breakdown Voltage	I _R = 0.1mA, T _J = 25°C	V _{BR}	100			V

DEVICE CHARACTERISTICS

YS10L100SL

Fig. 1 - Forward Characteristics

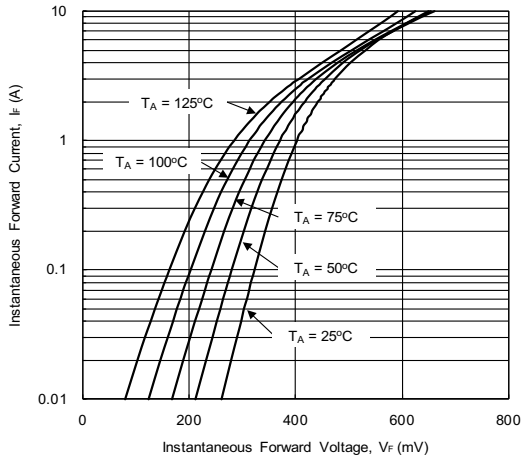


Fig. 2 - Reverse Characteristics

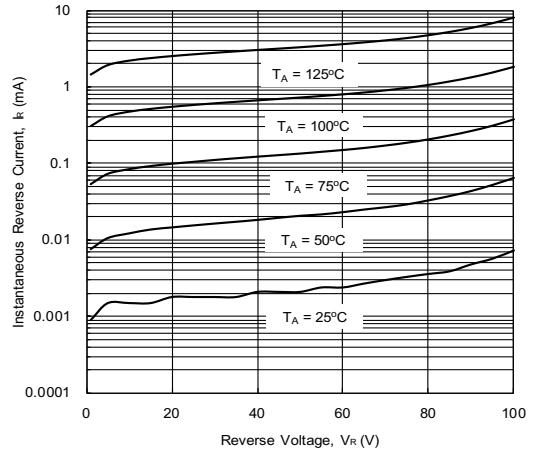


Fig. 3 - Forward Power Dissipation

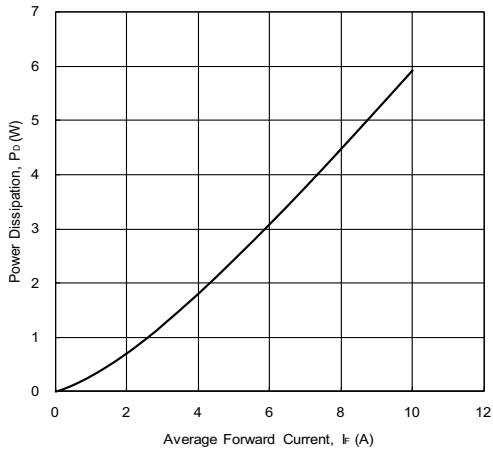


Fig. 4 - Forward Current Derating Curve

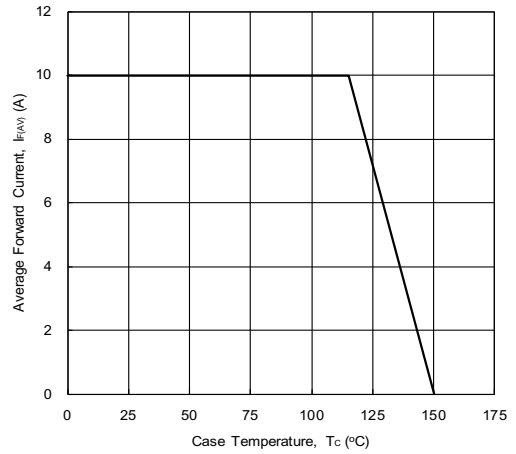
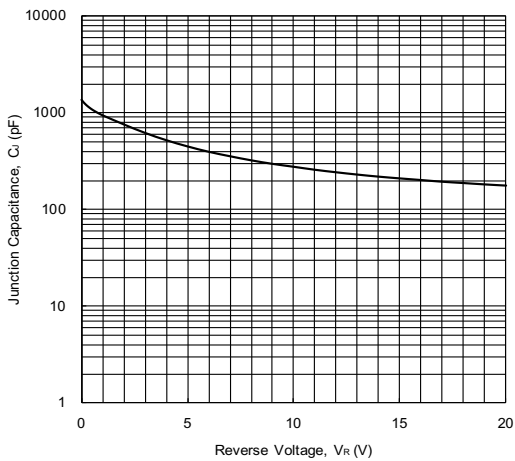


Fig. 5 - Junction Capacitance



PACKAGE OUTLINE AND DIMENSIONS

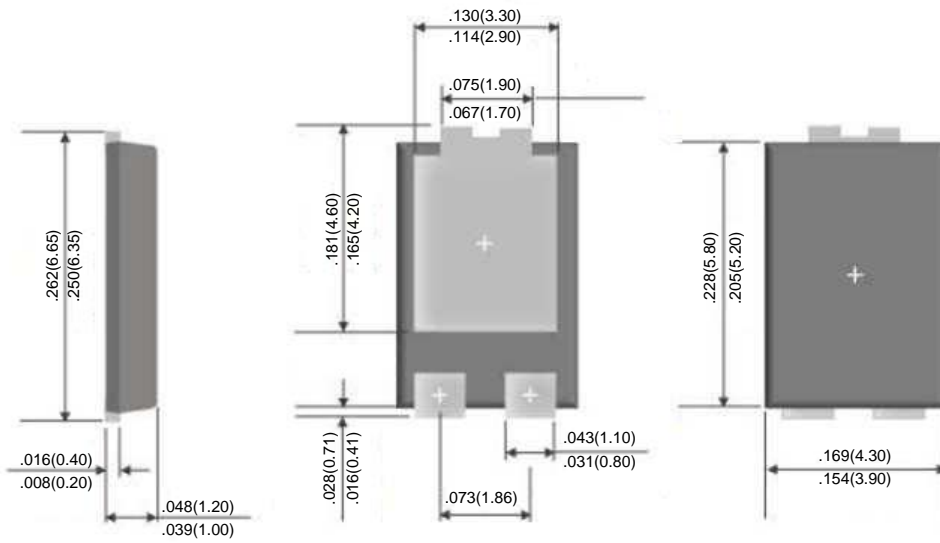
YS10L100SL

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="width: 100%; text-align: center;"> <tr> <td data-bbox="802 1805 1018 1845">YS</td> <td data-bbox="1018 1805 1233 1845">5L100SL</td> <td data-bbox="1233 1805 1449 1845">XXXX</td> </tr> <tr> <td data-bbox="802 1845 1018 1886">Logo</td> <td data-bbox="1018 1845 1233 1886">Device name</td> <td data-bbox="1233 1845 1449 1886">Date Code</td> </tr> </table>	YS	5L100SL	XXXX	Logo	Device name	Date Code
YS	5L100SL	XXXX					
Logo	Device name	Date Code					