Schottky Barrier Rectifier

multicomp PRO

RoHS Compliant

Features

- Low power loss, high efficiency
- Ideal for automated placement
- Ultrafast reverse recovery time
- Low forward voltage drop
- High surge capacity

Mechanical Data

Case : JEDEC SOD-123FL molded plastic body
Polarity : Colour band denotes cathode
Mounting Position : Any

Applications

For use in low voltage, high frequency inverters, polarity protection applications

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified. Single phase, half wave ,60Hz, resistive or inductive load. For capacitive load, derate current by 20%

Characteristics	Symbol	MP008608	MP008609	MP008610	MP008611	MP008612	MP008613	MP008614	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	80	100	V
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	56	70	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	80	100	V
Maximum Average Forward Rectified Current	$I_{(AV)}$	2.0							A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed On Rated Load (JEDEC Method)	I_{FSM}	50							A
Maximum Forward Voltage at 1.0A DC	V_F	0.55			0.7		0.85		V
Maximum DC Reverse Current @TA=25°C at Rated DC Blocking Voltage @TA=100°C	I_R	1.0							
		10							
Typical Thermal Resistance Junction to Lead (Note2)	$R_{\theta JL}$	28							Pf
Junction Temperature Range	T_J	-55 to+150							°C
Storage Temperature Range	T_{STG}	-55 to+150							°C

Note: 1. 300uS pulse width, 2% duty cycle.
2. Mounted on FR-4 PCB. With 0.9x1.5 mm copper pad areas (≈35 µm thick)
3. The typical data above is for reference only .

Rating and Charactertic Curves

Fig. 1 - Forward Current Derating Curve

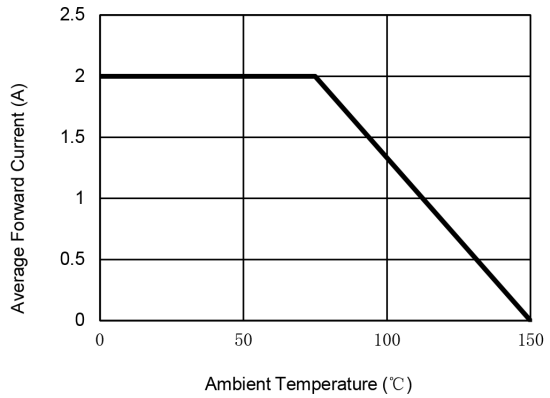


Fig. 2 - Maximum Non-Repetitive Surge Current

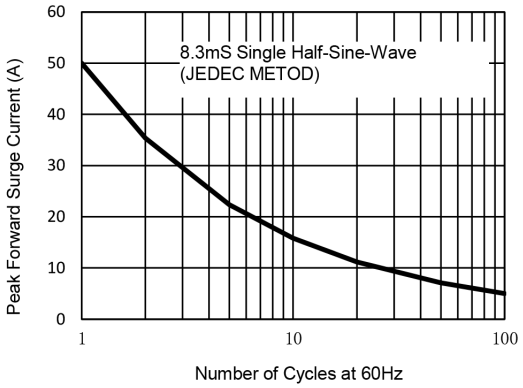


Fig. 3 - Typical Reverse Characteristics

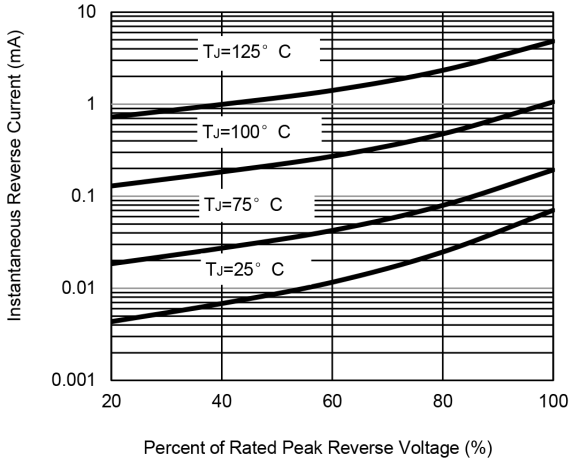


Fig. 4 - Typical Forward Characteristics

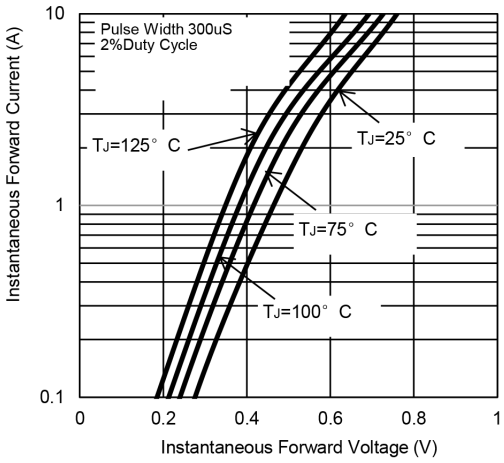


Fig. 5 - Typical Forward Characteristics

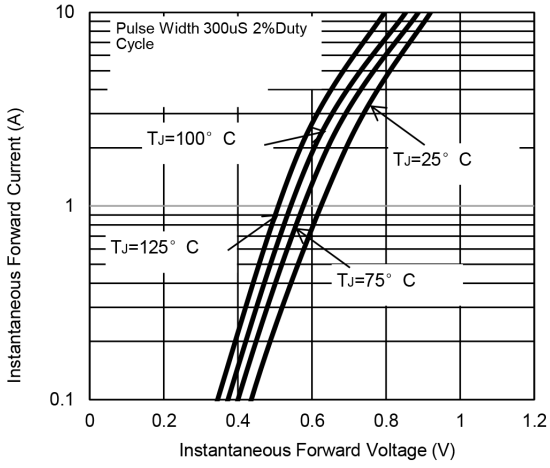
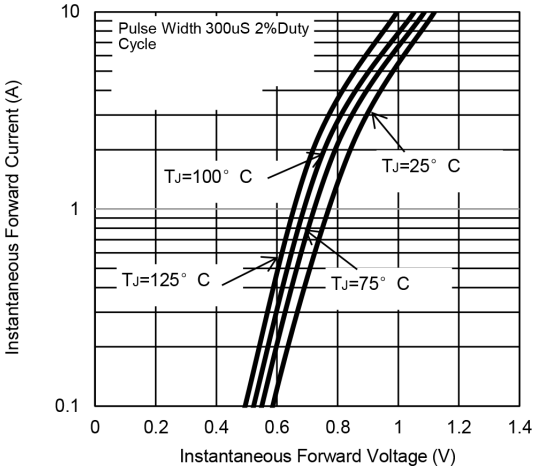
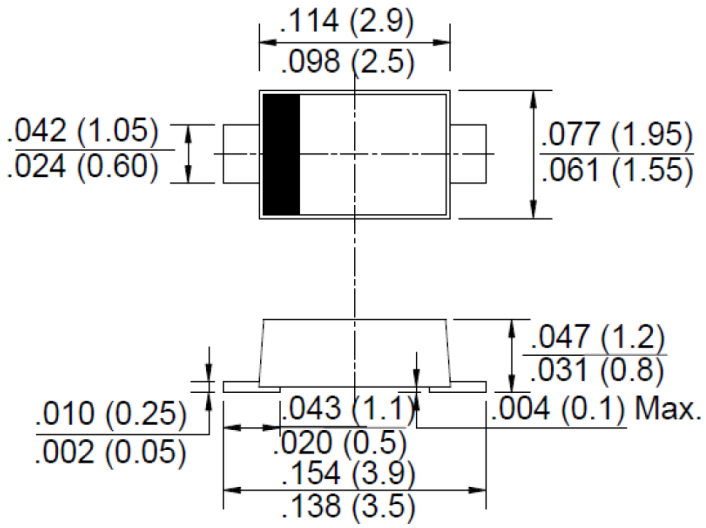


Fig. 6 - Typical Forward Characteristics



Package Dimensions

SOD-123FL



Dimensions : Millimetres

Part Number Table

Description	Part Number
Schottky Barrier Rectifier, 1A, 20V, SOD-123FL	MP008608
Schottky Barrier Rectifier, 1A, 30V, SOD-123FL	MP008609
Schottky Barrier Rectifier, 1A, 40V, SOD-123FL	MP008610
Schottky Barrier Rectifier, 1A, 50V, SOD-123FL	MP008611
Schottky Barrier Rectifier, 1A, 60V, SOD-123FL	MP008612
Schottky Barrier Rectifier, 1A, 80V, SOD-123FL	MP008613
Schottky Barrier Rectifier, 1A, 100V, SOD-123FL	MP008614