

**Surface Mount Schottky Barrier Rectifiers****Reverse Voltage - 45Volts
Forward Current - 15.0 Amperes****Features**

- Low power loss, high efficiency
- For surface mounted applications
- Low forward voltage drop
- Trench schottky technology

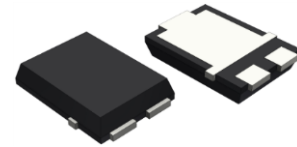
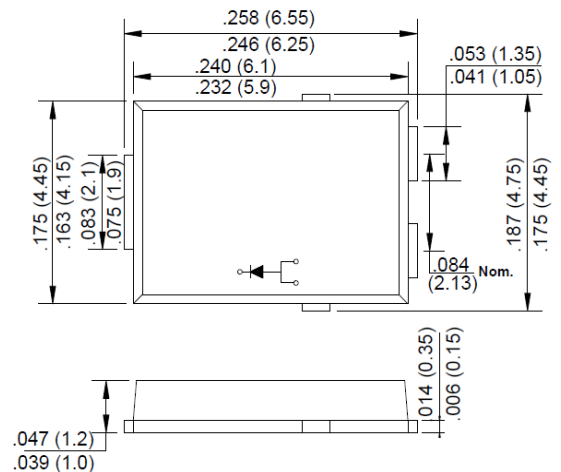
Mechanical Data

- Case: JEDEC TO-277A molded plastic
- Polarity: As marked on the body
- Mounting position: Any

Note: Products with logo  or  are made by HY Electronic (Cayman) Limited.

Applications

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

TO-277A**RoHS
COMPLIANT**

Package Outline Dimensions in Inches (Millimeters)

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	S15P45L	Unit
Maximum Repetitive Peak Reverse Voltage	VRRM	45	V
Maximum RMS Voltage	VRMS	31.5	V
Maximum DC Blocking Voltage	VDC	45	V
Maximum Average Forward Rectified Current (Note 1) @ Tc=110°C	IF(AV)	15.0	A
Peak Forward Surge Current, 8.3mS Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method)	IFSM	320	A
Peak Forward Voltage (Note2)	VF	TJ=25°C	0.36 (TYP.)
			0.38 (TYP.)
			0.44 (TYP.) 0.47 (MAX.)
Maximum DC Reverse Current @TJ=25°C at Rated DC Blocking Voltage @TJ=125°C	IR	0.25 (MAX.)	mA
		8.6 (TYP.)	mA
Typical Thermal Resistance Junction to Ambient	RθJA	60	°C/W
Typical Thermal Resistance Junction to Case	RθJC	8	°C/W
Junction Temperature Range	TJ	-55 to+150	°C
Storage Temperature Range	TSTG	-55 to+150	°C

Notes: 1. Mounted on 50 cm² FR-4 PCB .

2. 300uS pulse width, 2%duty cycle. 300uS.

3. The typical data above is for reference only .

S15P45L-13-00/99-00/01

Rev. 11, 18-May-2020



Fig. 1 - Forward Current Derating Curve

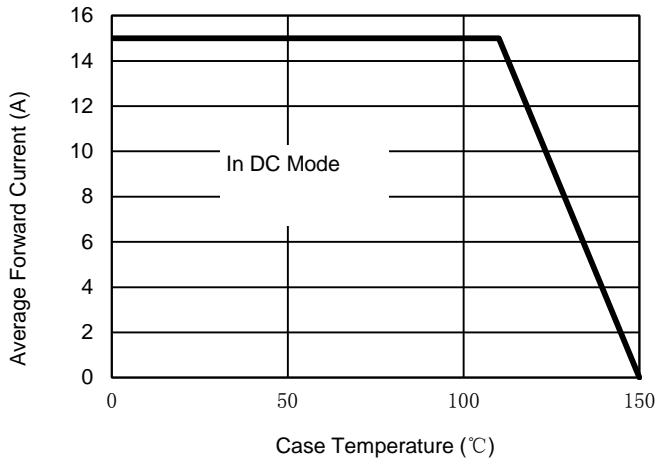


Fig. 2 - Maximum Non-Repetitive Surge Current

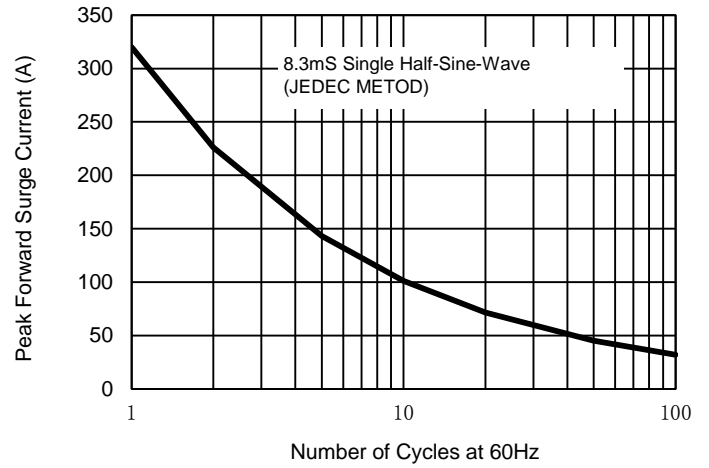


Fig. 3 - Typical Reverse Characteristics

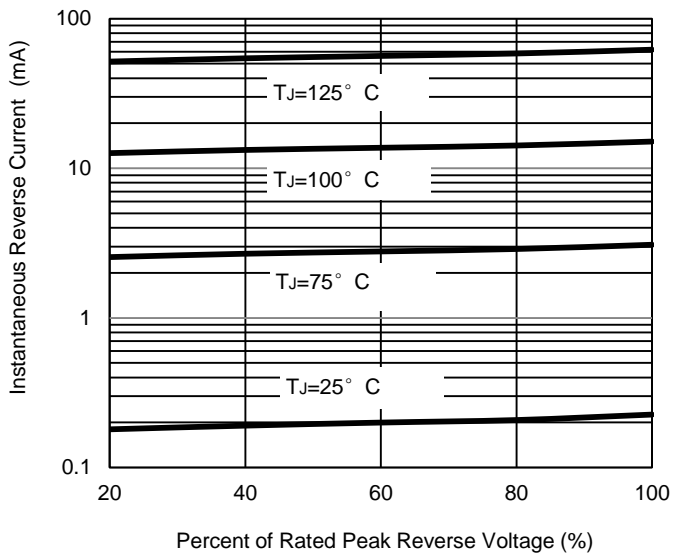
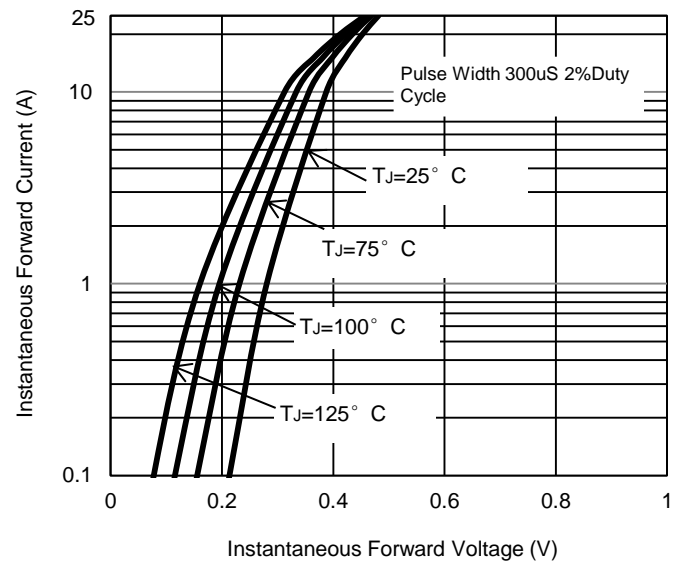


Fig. 4 - Typical Forward Characteristics





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