SB15L50

Trench MOSFET
Barrier Schottky Rectifier

Reverse Voltage - 50 V

Forward Current - 15 A

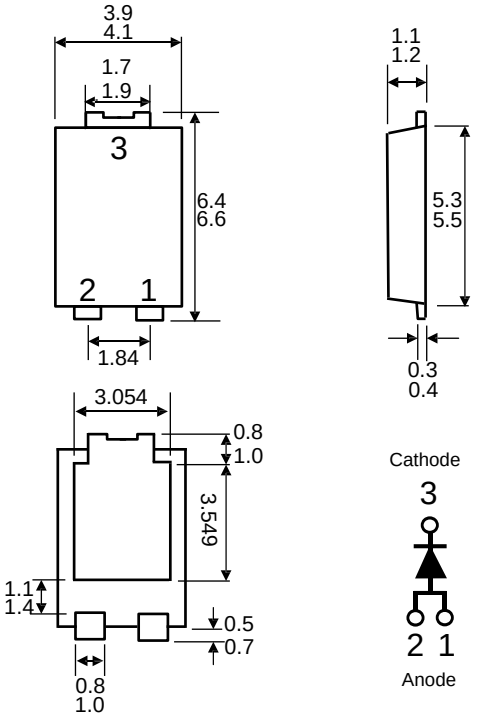
FEATURES

- Advanced trench technology
- Low forward voltage drop
- Low power losses
- High efficiency operation
- Lead free in comply with EU RoHS 2011/65/EU directives

MECHANICAL DATA

- Case: TO-277
- Terminals: Solderable per MIL-STD-750, Method 2026

TO-277



Dimensions in millimeters

Maximum Ratings (Per Leg) at Ta=25°C unless otherwise specified

Parameter		Symbols	Value	Units
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	50	V
Maximum RMS voltage		V_{RMS}	50	V
Maximum DC Blocking Voltage		V_{DC}	50	V
Maximum Average Forward Rectified Current	Per diode	$I_{F(AV)}$	15	A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave superimposed on rated load per diode		I_{FSM}	280	A
Operating Temperature Range		T_J	-55 ~ +150	°C
Storage Temperature Range		T_{STG}	-55 ~ +150	°C
Typical Thermal Resistance Per diode (munted onFR-4 PCB)	TO-277	$R_{\theta JC}$	72	°C/W

Note1: Thermal resistance from Junction to case per leg mounted on heatsink.

Electrical Characteristics (Per Leg) unless otherwise specified

Characteristics		Symbols	Value		Units
Forward Voltage Drop(Note2)			Typ	Max	
at I_F=5A Instantaneous forward voltage per diode	TA=25°C	V_F	0.40	-	V
	TA=125°C		0.29	-	
at I_F=15A Instantaneous forward voltage per diode	TA=25°C		0.48	0.52	
	TA=125°C		0.39	-	
Instantaneous reverse current per diode at rated reverse voltage	TA=25°C	I_R	20	60	uA
	TA=125°C		-	30	mA

Note2: (1)Pulse test: 300 μs pulse width, 1 % duty cycle
(2) Pulse test: Pulse width ≦ 40 ms

RATINGS AND CHARACTERISTIC CURVES