Schottky Barrier Rectifier VRRM 150 Volts, 20A

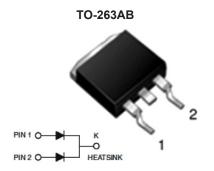




Features

- · Metal of silicon rectifier
- · Majority used for carrier conduction
- · Trench Schottky Technology
- · Low power loss, high efficiency
- · High current capability, low VF
- · High surge capacity
- · Lead free
- Meet UL flammability classification 94V-0
- Case style: TO-263AB
- · Weight: 0.08 ounces, 2.24 grams





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	Values	Unit
Max. Recurrent Peak Reverse Voltage	VRRM	150	
Max. RMS Voltage	VRMS	106	V
Max. DC Blocking Voltage	VDC	150	
Max. Average Forward Rectified Current (See Fig. 1) Max. Average Forward Rectified Current (Per Leg)	I(AV)	20 10	
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load	Ігѕм	120	A
Operating Temperature Range	TJ	-55 to +150	°C
Storage Temperature Range	Tstg	-55 to +175	

Electrical Characteristics

Parameter / Conditions	Symbol	Тур.	Max.	Unit
Breakdown voltage per diode	VBR	150 (minimum)	-	
Instantaneous forward voltage per diode (Note1) IF=5A @ T _J =25°C IF=5A @ T _J =125°C IF=10A @ T _J =125°C	VF	0.78 0.57 1.12 0.65	0.84 0.61 1.32 0.7	V
Maximum DC Reverse Current @ T _J = 25°C at Rated DC Blocking Voltage @T _J = 125°C	lR	90 30		μA mA
Typical Junction Capacitance (Note 2)	Сл	461		pF

Thermal Characteristics

Thermal Resistance Per Diode (Note 3)	Rejc	3.5	°C/W

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Notes:

- 1. 300µs pulse width, 2% duty cycle.
- 2. Measured at 1MHz and applied reverse voltage of 5V DC.
- 3. Thermal resistance junction to case.

Rating and Characteristic Curves

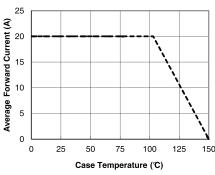


Figure 1. Forward Current Derating Curve

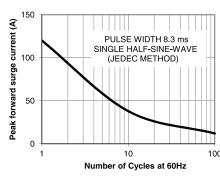
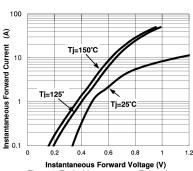


Figure 2. Maximum NON-Repetitive



Instantaneous Forward Voltage (V)
Figure 3. Typical Instantaneous Forward
Characteristics Per Leg

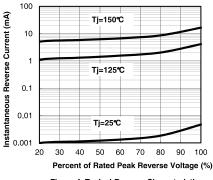


Figure 4. Typical Reverse Characteristics

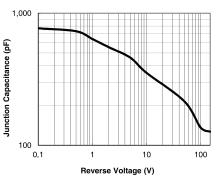


Figure 5. Typical Junction Capacitance

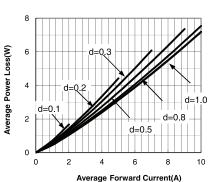
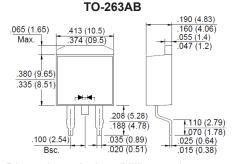


Figure 6. Forward Power Loss Characteristics



Dimensions: Inches (Millimetres)

Part Number Table

Description	Part Number	
Schottky Rectifier, Dual, 150V, 20A, TO-263AB	MP001025	

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