Schottky Barrier Rectifier VRRM 80 Volts, 20A

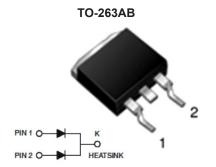
multicomp PRO



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	80		
Max. RMS Voltage	VRMS	56	V	
Max. DC Blocking Voltage	VDC	80		
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	IFSM	200	А	
Peak repetitive reverse current at tp = 2µs, 1kHz	IRRM	1		
Operating Temperature Range	TJ	-55 to +150	%6	
Storage Temperature Range	Тѕтс	-55 to +175	°C	

Electrical Characteristics

Parameter / Conditions	Symbol	Тур.	Max.	Unit
Breakdown voltage per diode	VBR	85 (minimum)	-	
Forward voltage (Note1)]
IF=5A @ T」=25°C		0.47	0.51	l v
IF=5A @ T」=125°C	VF	0.4	0.43	*
IF=10A @ T _J =25°C		0.55	0.59	
IF=10A @ T₃=125°C		0.51	0.55	
Maximum DC Reverse Current @ TJ = 25°C	l _R	120 40		μA
at Rated DC Blocking Voltage @T」= 125°C	IR I			mA
Typical Junction Capacitance (Note 2)	Cı	712		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 4V DC.
- 3. Thermal resistance junction to case.

Rating and Characteristic Curves

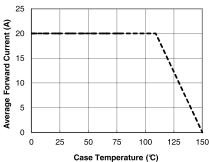


Figure 1. Forward Current Derating Curve

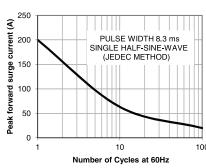
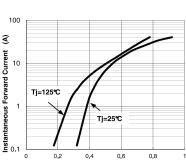
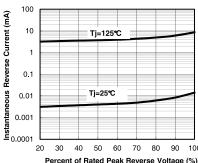


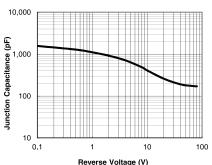
Figure 2. Maximum NON-Repetitive



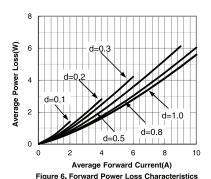
Instantaneous Forward Voltage (V) Figure 3. Typical Instantaneous Forward Characteristics Per Leg

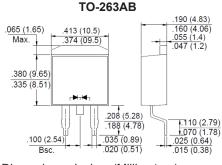


Percent of Rated Peak Reverse Voltage (%) Figure 4. Typical Reverse Characteristics



Reverse Voltage (V) Figure 5. Typical Junction Capacitance





Dimensions: Inches (Millimetres)

Part Number Table

Description	Part Number
Schottky Rectifier, Dual, 80V, 20A, TO-263AB	MP001031

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