Schottky Barrier Rectifier VRRM 100 Volts, 20A

multicomp PRO

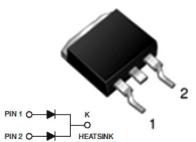


Features

- · 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	100	
Max. RMS Voltage	VRMS	70	v
Max. DC Blocking Voltage	VDC	100	
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	100	А
Peak repetitive reverse current at tp = 2 µs, 1kHz	Irrм	1]
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	110 (minimum)	-	
Instantaneous forward voltage per diode (Note1) IF=5A @ TJ=25°C IF=5A @ TJ=125°C IF=10A @ TJ=25°C IF=10A @ TJ=125°C	VF	0.6 0.56 0.77 0.7	0.64 0.6 0.85 0.75	V
Maximum DC Reverse Current @ T _J = 25°C at Rated DC Blocking Voltage @T _J = 125°C	lR	140 50		μA mA
Typical Junction Capacitance (Note 2)	Сл	460		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

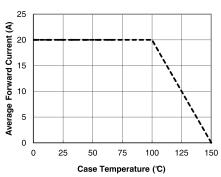


Figure 1. Forward Current Derating Curve

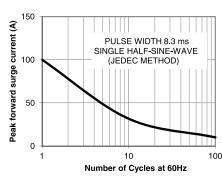
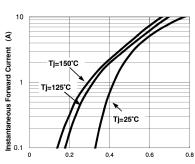


Figure 2. Maximum NON-Repetitive



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

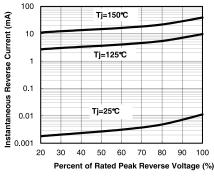


Figure 4. Typical Reverse Characteristics

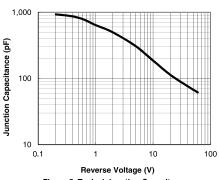
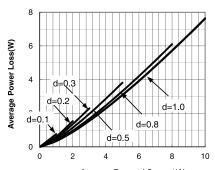
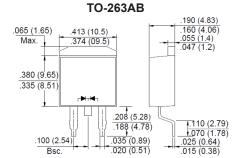


Figure 5. Typical Junction Capacitance



Average Forward Current(A)
Figure 6. Forward Power Loss Characteristics



Dimensions: Inches (Millimetres)

Part Number Table

Description	Part Number	
Schottky Rectifier, Dual, 100V, 20A, TO-263AB	MP001024	

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