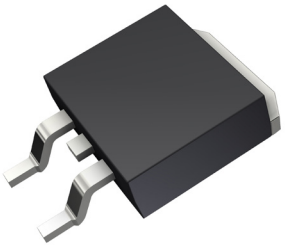
Schottky Barrier Rectifier
VRRM 100 Volts, 20A

multicomp PRO

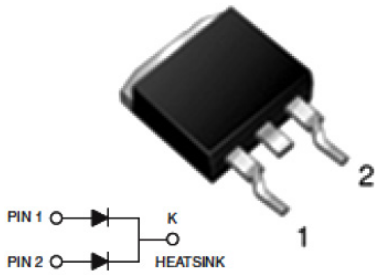


Features

- 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

RoHS Compliant

TO-263AB



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	V_{RRM}	100	V
Max. RMS Voltage	V_{RMS}	70	
Max. DC Blocking Voltage	V_{DC}	100	
Max. Average Forward Rectified Current (See Fig. 1) Max. Average Forward Rectified Current (Per Leg)	$I_{(AV)}$	20 10	A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load	I_{FSM}	100	
Peak repetitive reverse current at tp = 2 µs, 1kHz	I_{RRM}	1	
Operating Temperature Range	T_J	-55 to +150	°C
Storage Temperature Range	T_{STG}	-55 to +175	

Electrical Characteristics

Parameter / Conditions	Symbol	Typ.	Max.	Unit
Breakdown voltage per diode	V_{BR}	110 (minimum)	-	V
Instantaneous forward voltage per diode (Note1) IF=5A @ T_J=25°C IF=5A @ T_J=125°C IF=10A @ T_J=25°C IF=10A @ T_J=125°C	V_F	 0.6 0.56 0.77 0.7	 0.64 0.6 0.85 0.75	
Maximum DC Reverse Current @ T_J = 25°C at Rated DC Blocking Voltage @T_J = 125°C	I_R	140 50		µA mA
Typical Junction Capacitance (Note 2)	C_J	460		pF

Thermal Characteristics

Thermal Resistance Per Diode (Note 3)	$R_{\theta JC}$	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

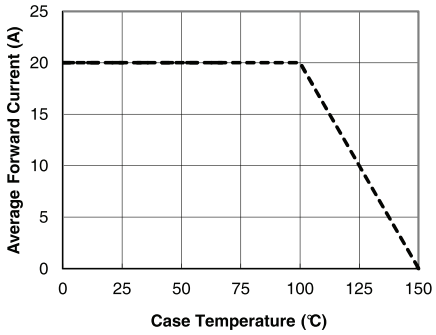


Figure 1. Forward Current Derating Curve

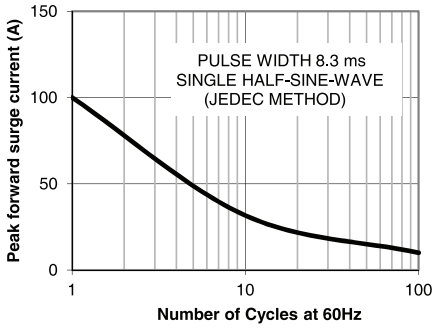


Figure 2. Maximum NON-Repetitive

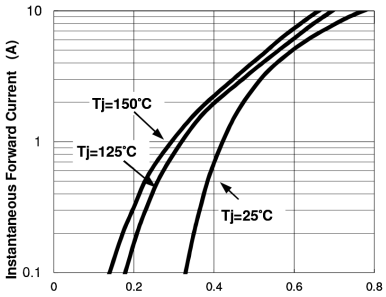


Figure 3. Typical Instantaneous Forward Characteristics Per Leg

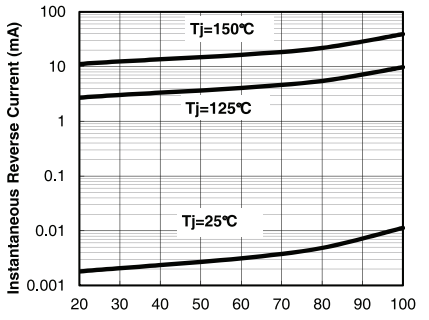


Figure 4. Typical Reverse Characteristics

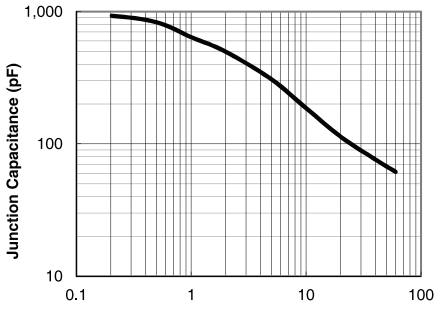


Figure 5. Typical Junction Capacitance

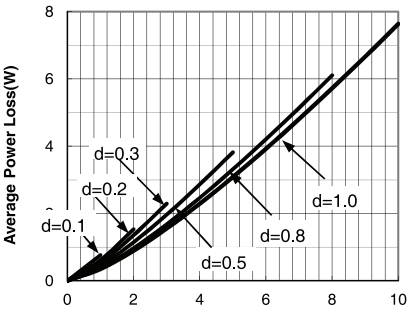
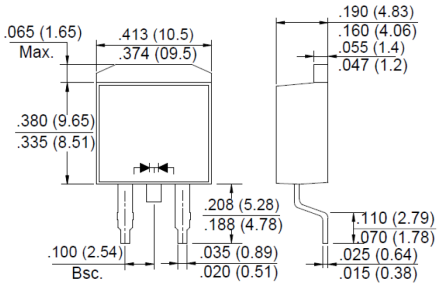


Figure 6. Forward Power Loss Characteristics

TO-263AB



Dimensions : Inches (Millimetres)

Part Number Table

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