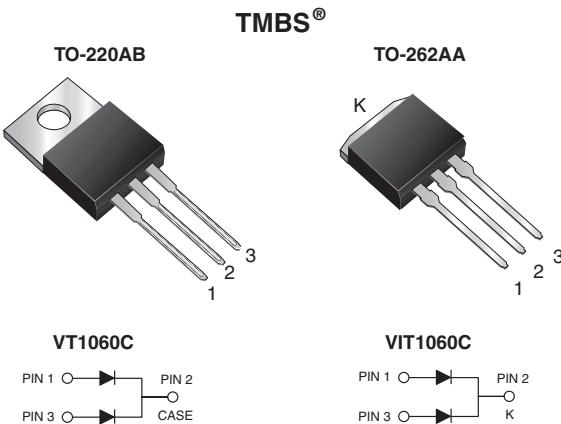


## Dual High-Voltage Trench MOS Barrier Schottky Rectifier

Ultra Low  $V_F$  = 0.39 V at  $I_F$  = 2.5 A



### FEATURES

- Trench MOS Schottky technology
- Low forward voltage drop, low power losses
- High efficiency operation
- Solder bath temperature 275 °C max. 10 s, per JESD 22-B106
- Material categorization: for definitions of compliance please see [www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)



### TYPICAL APPLICATIONS

For use in high frequency DC/DC converters, switching power supplies, freewheeling diodes, OR-ing diode, and reverse battery protection.

### MECHANICAL DATA

**Case:** TO-220AB and TO-262AA

Molding compound meets UL 94 V-0 flammability rating  
Base P/N-M3 - halogen-free, RoHS-compliant, and commercial grade

**Terminals:** matte tin plated leads, solderable per J-STD-002 and JESD 22-B102

M3 suffix meets JESD 201 class 1A whisker test

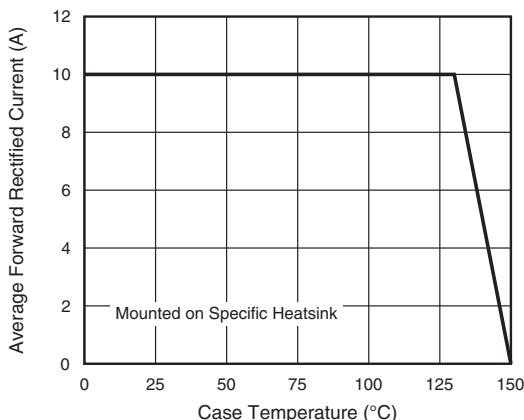
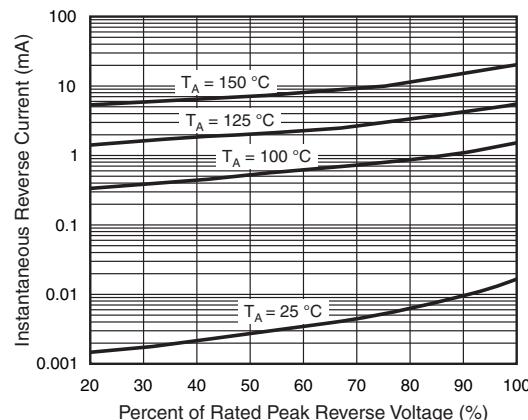
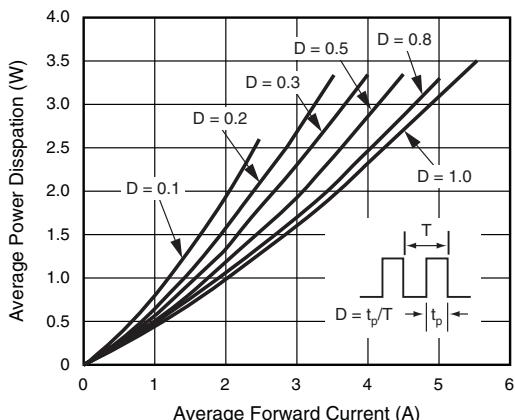
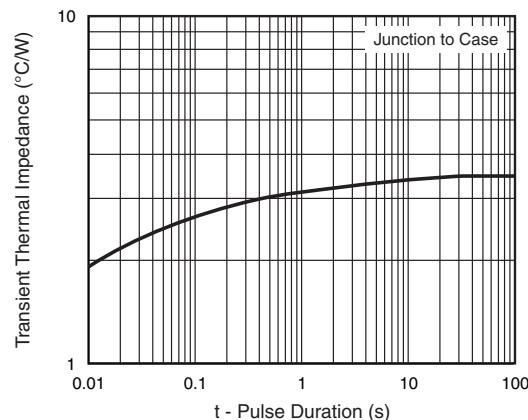
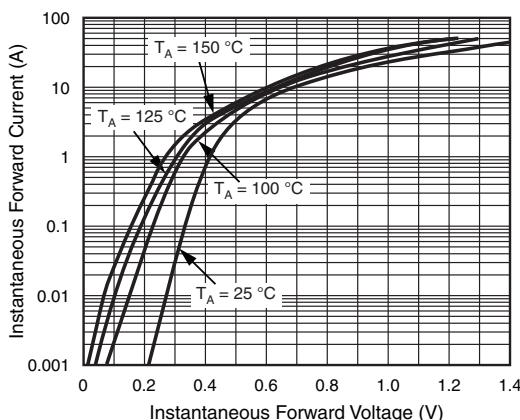
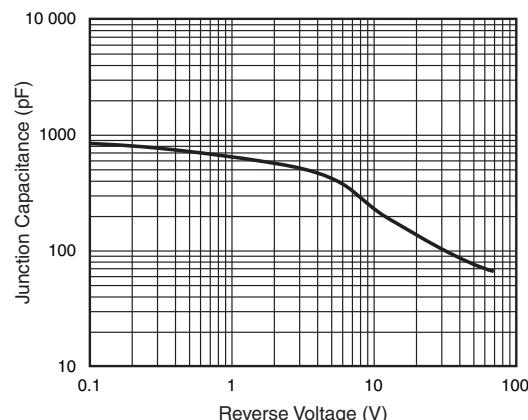
**Polarity:** as marked

**Mounting Torque:** 10 in-lbs maximum

PRIMARY CHARACTERISTICS	
$I_{F(AV)}$	2 x 5.0 A
$V_{RRM}$	60 V
$I_{FSM}$	100 A
$V_F$ at $I_F$ = 5.0 A	0.50 V
$T_J$ max.	150 °C
Package	TO-220AB, TO-262AA
Diode variation	Common cathode

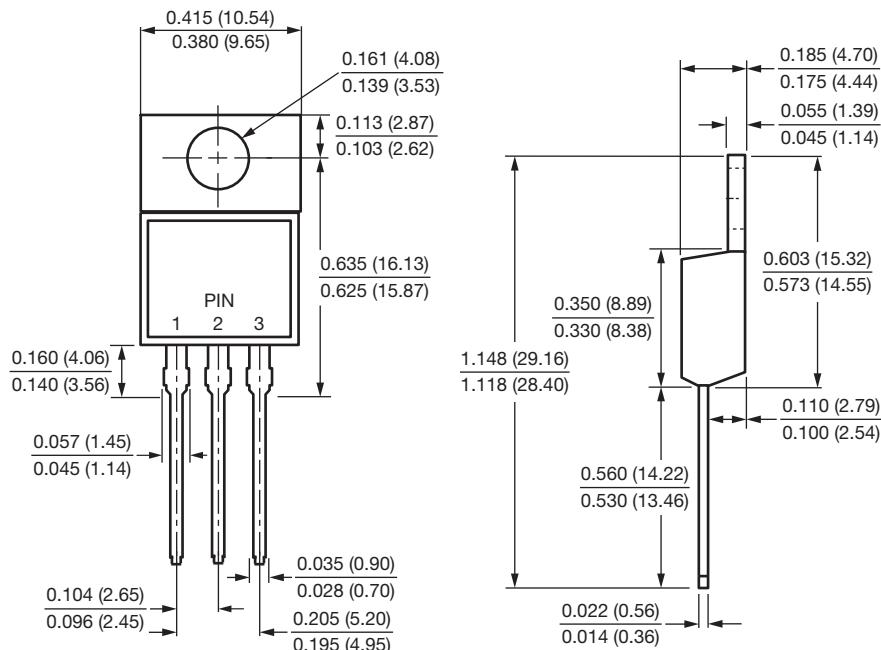
MAXIMUM RATINGS ( $T_A$ = 25 °C unless otherwise noted)				
PARAMETER	SYMBOL	VT1060C	VIT1060C	UNIT
Maximum repetitive peak reverse voltage	$V_{RRM}$	60		V
Maximum average forward rectified current (fig. 1)	$I_{F(AV)}$	10	A	
		5		
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	$I_{FSM}$	100		A
Voltage rate of change (rated $V_R$ )	$dV/dt$	10 000		V/μs
Operating junction and storage temperature range	$T_J, T_{STG}$	-55 to +150		°C



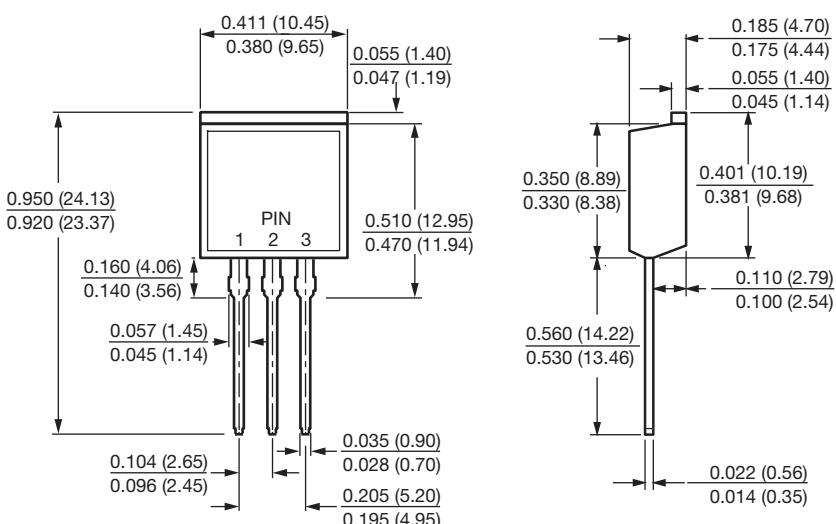
**RATINGS AND CHARACTERISTICS CURVES** ( $T_A = 25^\circ\text{C}$  unless otherwise noted)

**Fig. 1 - Maximum Forward Current Derating Curve**

**Fig. 4 - Typical Reverse Characteristics**

**Fig. 2 - Forward Power Dissipation Characteristics**

**Fig. 5 - Typical Transient Thermal Impedance**

**Fig. 3 - Typical Instantaneous Forward Characteristics**

**Fig. 6 - Typical Junction Capacitance**

## **PACKAGE OUTLINE DIMENSIONS** in inches (millimeters)

## TO-220AB



TO-262AA



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