

SBM3060VPT

SCHOTTKY BARRIER RECTIFIER

Voltage

60 V

Current

30 A

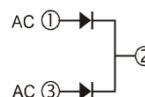
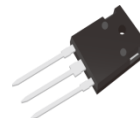
Features

- Low forward voltage drop
- Low power loss, high efficiency
- High surge current capability
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

Mechanical Data

- Case: TO-3P Package
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.225 ounces, 6.37 grams

TO-3P



Maximum Ratings and Thermal Characteristics ($T_A = 25^{\circ}\text{C}$ unless otherwise noted)

PARAMETER		SYMBOL	LIMIT	UNITS
Maximum Repetitive Peak Reverse Voltage		V _{RRM}	60	V
Maximum Rms Voltage		V _{RMS}	42	V
Maximum Dc Blocking Voltage		V _{DC}	60	V
Maximum Average Forward Current	per device	I _{F(AV)}	30	A
	per diode		15	
Peak Forward Surge Current: 8.3 ms Single Half Sine-Wave Superimposed On Rated Load		I _{FSM}	250	A
Typical Junction Capacitance		C _J	650	pF
Measured at 1 MHZ And Applied V _R = 4V				
Typical Thermal Resistance		R _{θJC} ⁽¹⁾	1.5	°C/W
Operating Junction Temperature Range		T _J	-55~150	°C
Storage Temperature Range		T _{STG}	-55~150	°C



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Electrical Characteristics ($T_A = 25^{\circ}\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNITS
Forward Voltage	V_F	$I_F = 1\text{ A}, T_J = 25^{\circ}\text{C}$	-	0.3	-	V
		$I_F = 5\text{ A}, T_J = 25^{\circ}\text{C}$	-	0.39	-	
		$I_F = 15\text{ A}, T_J = 25^{\circ}\text{C}$	-	-	0.59	
		$I_F = 1\text{ A}, T_J = 125^{\circ}\text{C}$	-	0.19	-	
		$I_F = 5\text{ A}, T_J = 125^{\circ}\text{C}$	-	0.33	-	
Reverse Current	$I_R^{(2)}$	$V_R = 48\text{ V}, T_J = 25^{\circ}\text{C}$	-	44	-	uA
		$V_R = 60\text{ V}, T_J = 25^{\circ}\text{C}$	-	-	220	
		$V_R = 60\text{ V}, T_J = 125^{\circ}\text{C}$	-	20	-	mA

NOTES:

1. Mounted on infinite heatsink
2. Short duration pulse test used to minimize self-heating effect

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TYPICAL CHARACTERISTIC CURVES

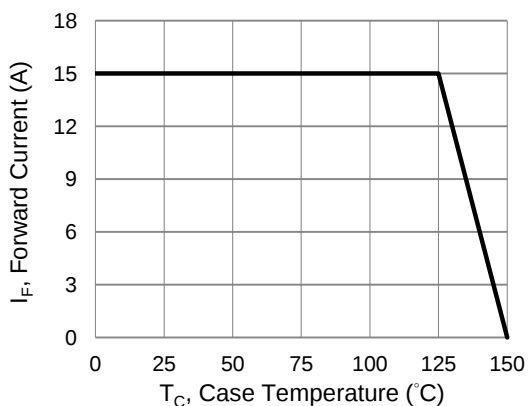


Fig.1 Forward Current Derating Curve

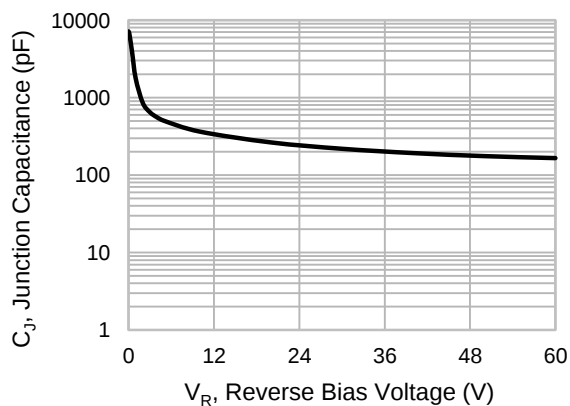


Fig.2 Typical Junction Capacitance

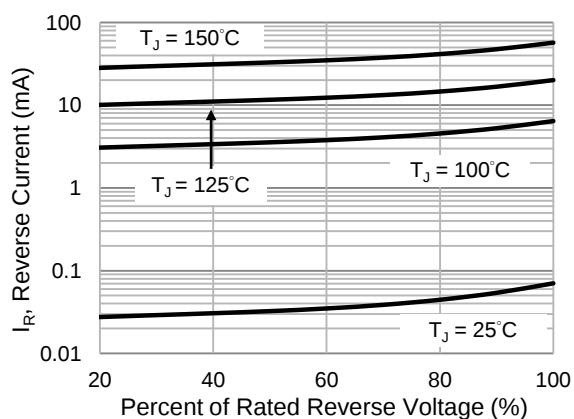


Fig.3 Typical Reverse Characteristics

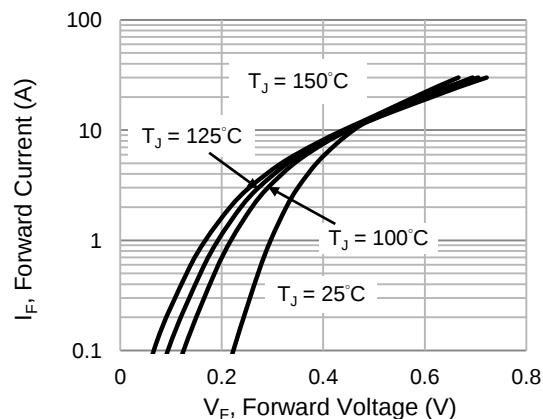


Fig.4 Typical Forward Characteristics

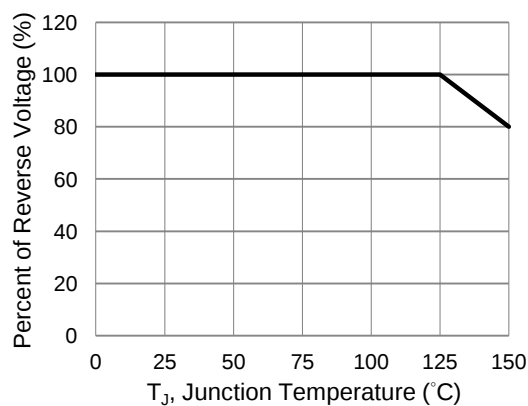


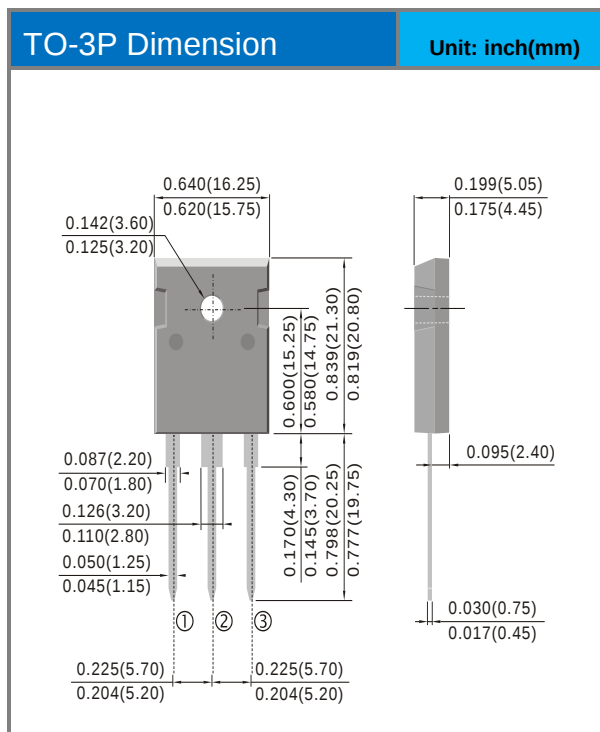
Fig.5 Operating Temperature Derating Curve

SBM3060VPT

Part No Packing Code Version

Part No Packing Code	Package Type	Packing Type	Marking	Version
SBM3060VPT_T0_00001	TO-3P	30pcs / Tube	SBM3060VPT	Halogen free

Packaging Information & Mounting Pad Layout





SBM3060VPT

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