



SBM1060VDC

ULTRA LOW VF SCHOTTKY RECTIFIER

VOLTAGE 60 Volt **CURRENT** 10 Ampere

TO-263 / D²PAK Unit : inch(mm)

FEATURES

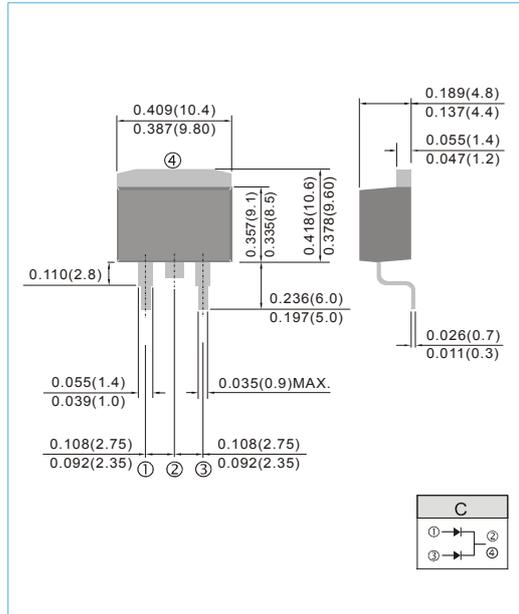
- Ultra Low forward voltage drop, low power loss
- High efficiency operation
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

MECHANICAL DATA

Case : TO-263/D²PAK, Plastic

Terminals : Solderable per MIL-STD-750, Method 2026

Weight: 0.049 ounces, 1.38 grams



MAXIMUM RATINGS(T_A=25°C unless otherwise noted)

PARAMETER	SYMBOL	VALUE	UNIT
Maximum repetitive peak reverse voltage	V _{RRM}	60	V
Maximum rms voltage	V _{RMS}	42	V
Maximum dc blocking voltage	V _R	60	V
Maximum average forward rectified current	I _{F(AV)}	10 5	A
Peak forward surge current : 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	120	A
Typical junction capacitance (V _R =4V, f=1MHz)	C _J	300	pF
Typical thermal resistance per diode (Note 1)	R _{θJC}	3.5	°C/W
Operating junction temperature range	T _J	-55 to + 150	°C
Storage temperature range	T _{STG}	-55 to + 150	°C

Note : 1. Mounted on infinite heatsink.



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

PARAMETER	SYMBOL	TEST CONDITIONS	MIN.	TYP.	MAX.	UNIT	
Breakdown voltage per diode	V_{BR}	$I_R=0.5\text{mA}$	60	-	-	V	
Instantaneous forward voltage per diode	V_F	$I_F=1\text{A}$	-	0.32	-	V	
		$I_F=3\text{A}$	-	0.4	-	V	
		$I_F=5\text{A}$	-	0.46	0.52	V	
		$T_J=25^\circ\text{C}$	-	-	-	-	-
Reverse current per diode	I_R	$V_R=48\text{V}$	-	40	-	μA	
		$V_R=60\text{V}$	-	-	220	μA	
		$T_J=25^\circ\text{C}$	-	-	-	-	-
		$T_J=125^\circ\text{C}$	-	12	-	mA	

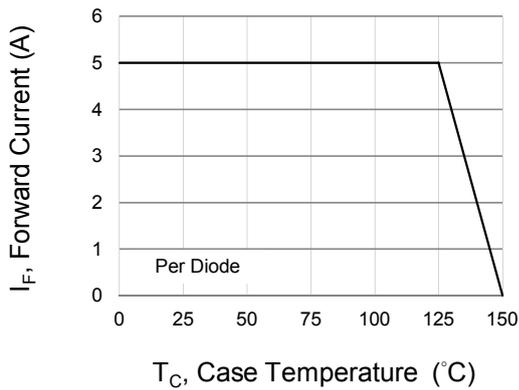


Fig.1 Forward Current Derating Curve

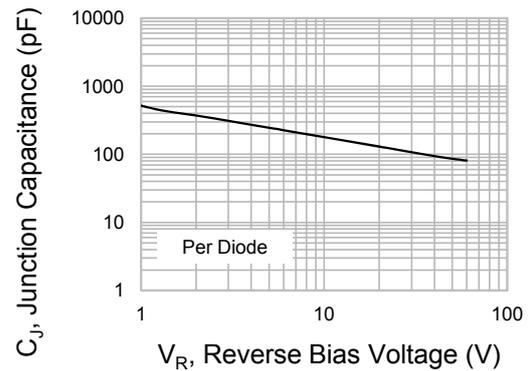


Fig.2 Typical Junction Capacitance

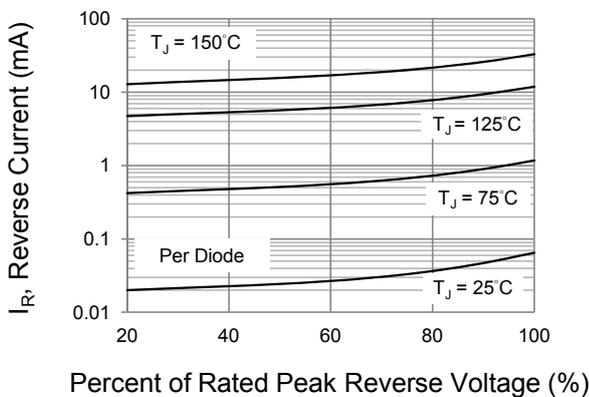


Fig.3 Typical Reverse Characteristics

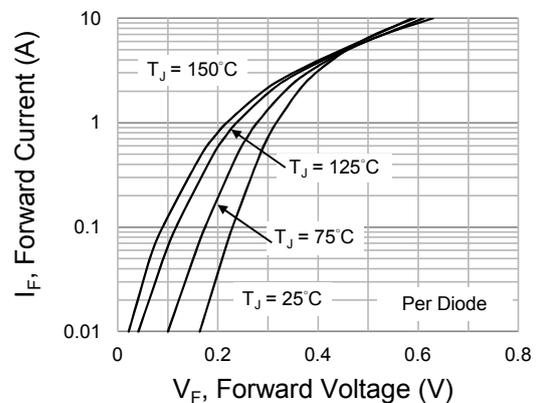
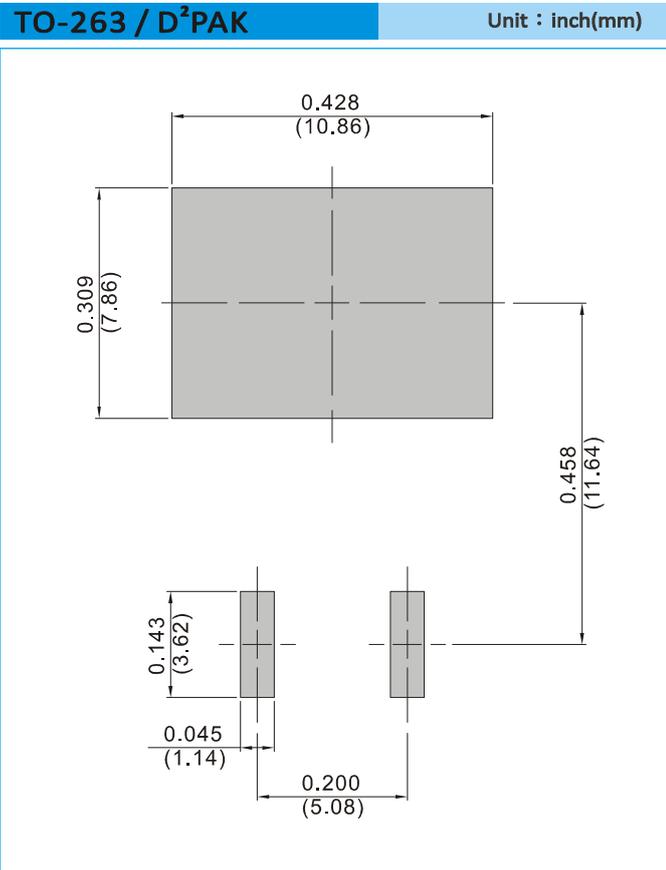


Fig.4 Typical Forward Characteristics



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MOUNTING PAD LAYOUT



ORDER INFORMATION

- Packing information
T/R - 0.8K per 13" plastic Reel



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Part No_packing code_Version

SBM1060VDC_R2_00001

For example :

RB500V-40_R2_00001



Packing Code XX				Version Code XXXXX		
Packing type	1 st Code	Packing size code	2 nd Code	HF or RoHS	1 st Code	2 nd ~5 th Code
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			



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