



SBM1060L

ULTRA LOW VF SCHOTTKY RECTIFIER

Voltage

60 V

Current

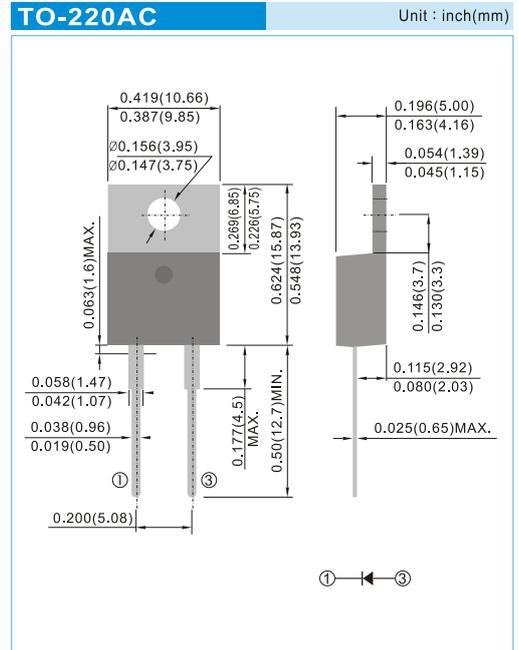
10 A

Features

- Ultra low forward voltage drop, low power loss
- High efficiency operation
- Lead free in compliance with EU RoHS 2011/65/EU directive.
- Green molding compound as per IEC61249 Std. . (Halogen Free)

Mechanical Data

- Case: Molded plastic, TO-220AC
- Terminals: Axial leads, solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.0067 ounces, 1.89 grams
- Marking: Part number



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

PARAMETER	SYMBOL	LIMIT	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	60	V
Maximum rms voltage	V_{RMS}	42	V
Storage temperature range	V_R	60	V
Maximum average forward rectified current	$I_{F(AV)}$	10	A
Peak forward surge current : 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	150	A
Typical junction capacitance ($V_R=4V$, $f=1\text{MHz}$)	C_J	480	pF
Typical thermal resistance (Note 1)	$R_{\theta JC}$	3.5	$^{\circ}\text{C/W}$
Operating junction temperature range	T_J	-55 to +150	$^{\circ}\text{C}$
Storage temperature range	T_{STG}	-55 to +150	$^{\circ}\text{C}$

Note : 1. The Device mounted on a infinite heatsink , then measured the center of the marking side.



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

PARAMETER	SYMBOL	TEST CONDITION		MIN.	TYP.	MAX.	UNITS
Breakdown voltage	V_{BR}	$I_R=0.5\text{mA}$	$T_J=25^\circ\text{C}$	60	-	-	V
Instantaneous forward voltage	V_F	$I_F=1\text{A}$	$T_J=25^\circ\text{C}$	-	0.3	-	V
		$I_F=5\text{A}$		-	0.41	-	
		$I_F=10\text{A}$		-	0.51	0.57	
		$I_F=1\text{A}$	$T_J=125^\circ\text{C}$	-	0.21	-	V
$I_F=5\text{A}$	-	0.38		-			
Reverse current	I_R	$V_R=42\text{V}$	$T_J=25^\circ\text{C}$	-	45	-	μA
			$T_J=125^\circ\text{C}$	-	12	-	mA
		$V_R=60\text{V}$	$T_J=25^\circ\text{C}$	-	95	220	μA
			$T_J=125^\circ\text{C}$	-	20	-	mA

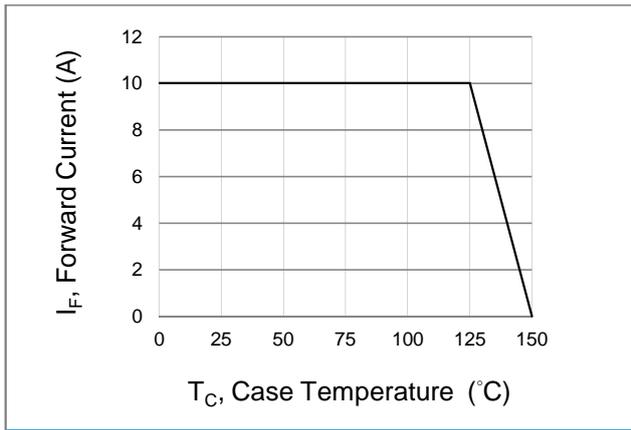


Fig.1 Forward Current Derating Curve

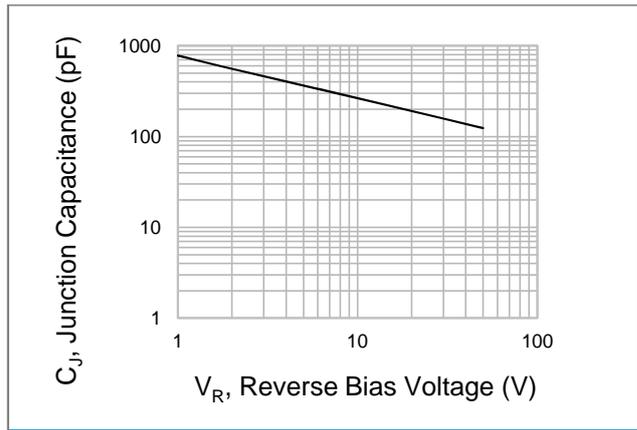


Fig.2 Typical Junction Capacitance

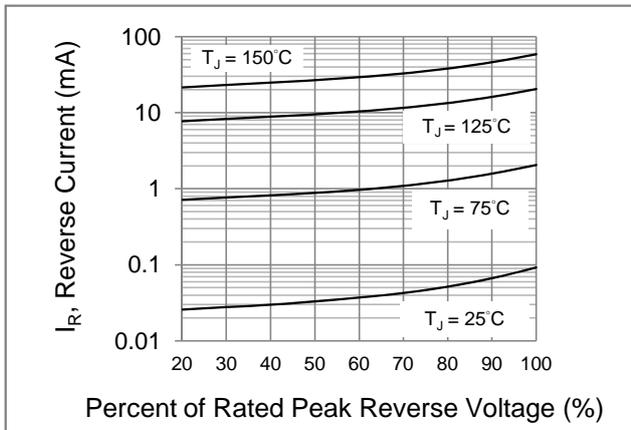


Fig.3 Typical Reverse Characteristics

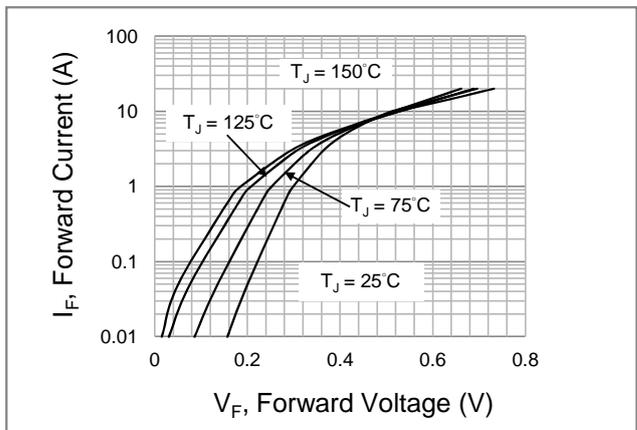


Fig.4 Typical Forward Characteristics



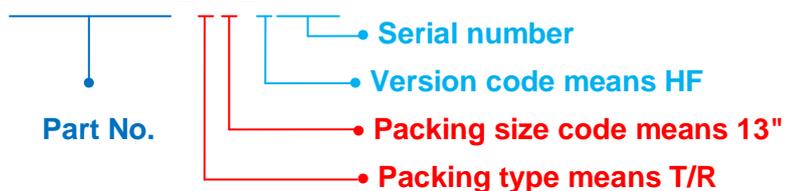
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Part No_packing code_Version

SBM1060L_T0_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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