



#### ULTRA LOW VF SCHOTTKY RECTIFIER

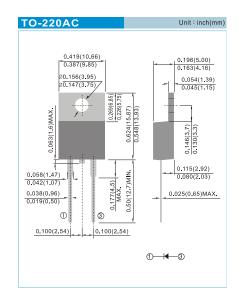
Voltage 60 V Current 10 A

#### **Features**

- Ultra low forward voltage drop, low power loss
- High efficiency operation
- Lead free in compliance with EU RoHS 2011/65/EU directive.

#### 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<sub>A</sub>=25°C unless otherwise noted)

PARAMETER	SYMBOL	LIMIT	UNIT	
Maximum repetitive peak reverse voltage		VRRM	60	V
Maximum rms voltage	VRMS	42	V	
Storage temperature range	VR	60	V	
Maximum average forward rectified current	<b>I</b> F(AV)	10	Α	
Peak forward surge current: 8.3ms single half sine- wave superimposed on rated load		IFSM	150	А
Typical junction capacitance (V <sub>R</sub> =4V, f=1MHz)		Сл	480	pF
Typical thermal resistance	(Note 1)	Rojc	3.5	°C/W
Operating junction temperature range		Тл	-55 to +150	°C
Storage temperature range		Тѕтс	-55 to +150	°C

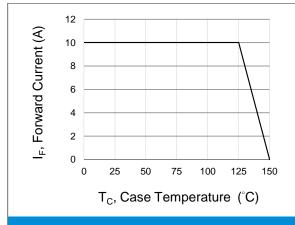
Note: 1. The Device mounted on a infinite heatsink, then measured the center of the marking side.





## Electrical Characteristics (T<sub>A</sub>=25 °C unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITION		MIN.	TYP.	MAX.	UNITS
Breakdown voltage	$V_{BR}$	I <sub>R</sub> =0.5mA	T <sub>J</sub> =25°C	60	-	-	V
Instantaneous forward voltage	V <sub>F</sub>	I <sub>F</sub> =1A	T <sub>J</sub> =25°C	-	0.3	-	V
		I <sub>F</sub> =5A		-	0.41	-	
		I <sub>F</sub> =10A		-	0.51	0.57	
		I <sub>F</sub> =1A	T <sub>J</sub> =125°C	-	0.21	-	V
		I <sub>F</sub> =5A		-	0.38	-	
Reverse current		V <sub>R</sub> =42V	T <sub>J</sub> =25°C	-	45	-	μА
			T <sub>J</sub> =125°C	-	12	-	mA
	I <sub>R</sub>	V <sub>R</sub> =60V	T <sub>J</sub> =25°C	-	95	220	μА
			T <sub>J</sub> =125°C	-	20	-	mA



**Fig.1 Forward Current Derating Curve** 

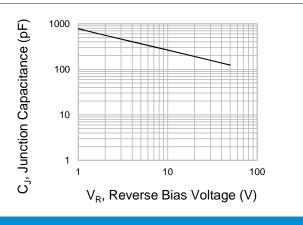


Fig.2 Typical Junction Capacitance

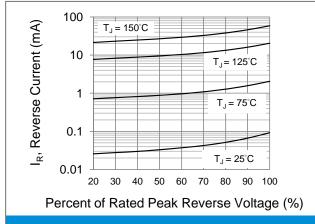


Fig.3 Typical Reverse Characteristics

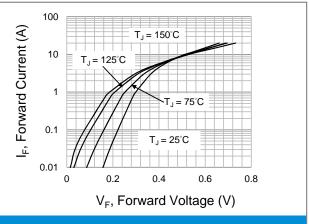


Fig.4 Typical Forward Characteristics

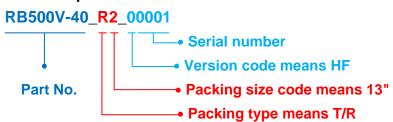




### Part No\_packing code\_Version

SBM1060L\_T0\_00001 SBM1060L\_T0\_10001

### For example:



Packing Code XX				Version Code XXXXX		
Packing type	1 <sup>st</sup> Code	Packing size code	2 <sup>nd</sup> Code	HF or RoHS	1 <sup>st</sup> Code	2 <sup>nd</sup> ~5 <sup>th</sup> Code
Tape and Ammunition Box (T/B)	Α	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	В	13"	2			
Tube Packing (T/P)	Т	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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