

SBD
Schottky Barrier Diode, 200V, 2×5A

Description:

These diodes are optimized to get low forward voltage and low reverse leakage current. These devices are suited for high frequency switched mode power supplies.

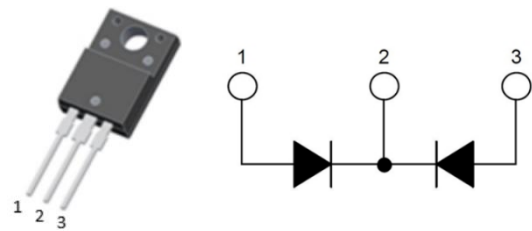
Features:

- High ESD capability
- 150°C operating junction temperature
- High frequency operation
- Low IR value
- High surge capacity

Product Summary	
V_R	200 V
$I_{F(AV)}$	2×5 A

Applications:

- Switched mode power supply



Absolute Maximum Ratings						
Parameter	Symbol	Test Conditions	Values			Units
Repetitive peak reverse voltage	V _{RRM}		200			V
Continuous forward current	I _{F(AV)}	T _A =110°C	10			A
Single pulse forward current	I _{FSM}	T _A =25°C	150			A
Maximum repetitive forward current	I _{FRM}	Square wave, 20kHz	25			A
Operating junction	T _j		150			°C
Storage temperatures	T _{stg}		-55 to +150			°C
Electrical characteristics (Ta=25 °C unless otherwise specified)						
Parameter	Symbol	Test Conditions	Min.	Typ.	Max.	Units
Breakdown voltage	V _{BR}	I _R =100μA	200			V
Blocking voltage	V _R					
Forward voltage	V _F	I _F =3.0A		0.79	0.85	V
		I _F =5.0A		0.86	0.93	
		I _F =3.0A, T _j =125°C		0.69	0.80	
		I _F =5.0A, T _j =125°C		0.74	0.85	
Reverse leakage current	I _R	V _R = V _{RRM}			10	μA
		T _j =125 °C, V _R =200V			2000	μA
Thermal characteristics						
Parameter	Symbol	Typ	MAX			Units
Junction-to-Case	R _{thJC}	-	4.2			°C/W

Typical Characteristics

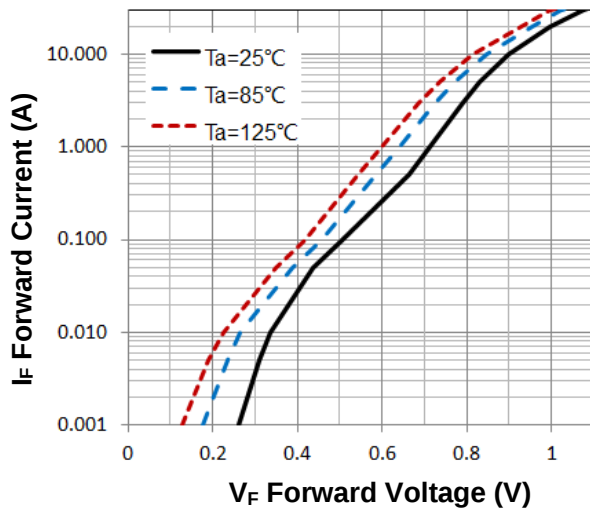


Figure 1. Forward Characteristic(typ.)

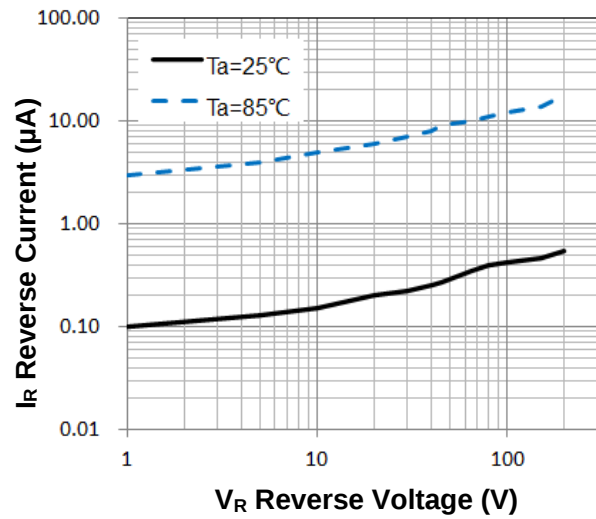


Figure 2. Reverse Characteristic (typ.)

Package Information			
TO-220F PACKAGE			
Symbol	Dimensions(millimeters)		
	Min.	Max.	
A	4.60	5.00	
A1	2.40	2.80	
A2	0.60	1.00	
A3	2.50	2.90	
b	0.70	0.90	
b1	1.20	1.60	
c	0.40	0.60	
e	2.34	2.74	
E	9.85	10.45	
E1	6.80	7.20	
H	15.80	16.20	
H1	9.00	9.40	
H2	12.70	13.30	
H3	3.10	3.50	
G	2.80	3.20	
ΦP	3.00	3.40	

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