

SBD

Schottky Barrier Diode, 100V, 2×10A

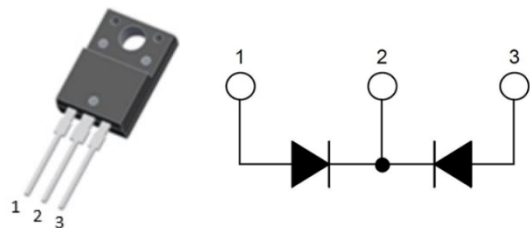
Description:

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	100 V
$I_{F(AV)}$	2×10 A



Applications:

- Switched mode power supply

Absolute Maximum Ratings						
Parameter	Symbol	Test Conditions	Values			Units
Repetitive peak reverse voltage	V _{RRM}		100			V
Continuous forward current	I _{F(AV)}	T _A =110°C	20			A
Single pulse forward current	I _{FSM}	T _A =25°C	200			A
Maximum repetitive forward current	I _{FRM}	Square wave, 20kHz	60			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	100			V
Blocking voltage	V _R					
Forward voltage	V _F	I _F =5.0A		0.75	0.80	V
		I _F =10 A		0.80	0.85	
		I _F =5.0A, T _j =125°C		0.60	0.70	
		I _F =10 A, T _j =125°C		0.65	0.75	
Reverse leakage current	I _R	V _R = V _{RRM}			10	μA
		T _j =125 °C, V _R =100V			2000	μA
Thermal characteristics						
Parameter	Symbol	Typ	MAX			Units
Junction-to-Case	R _{thJC}	-	4.0			°C/W

Typical Characteristics

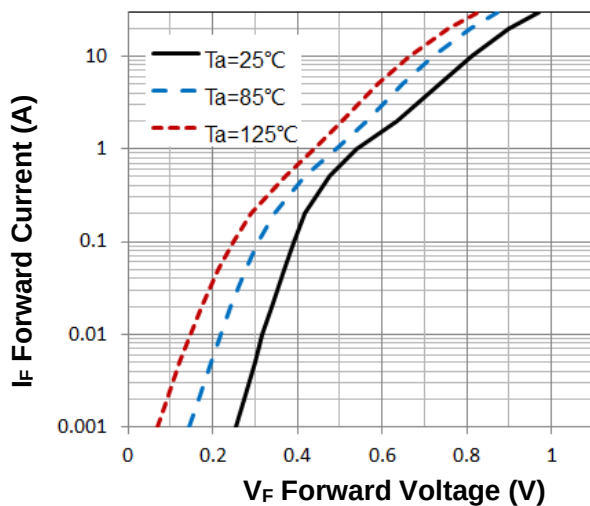


Figure 1. Forward Characteristic(typ.)

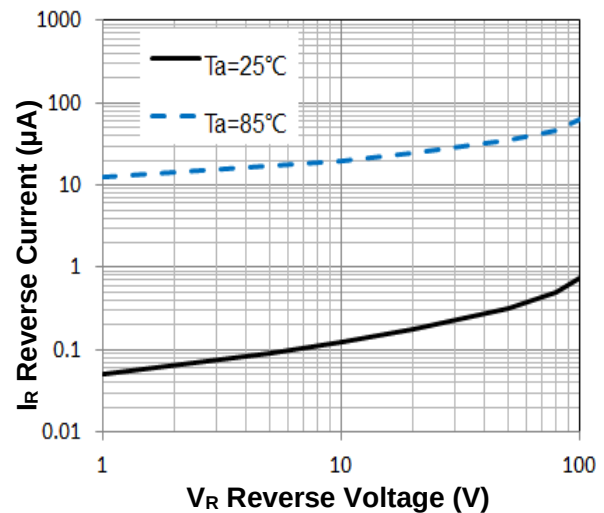
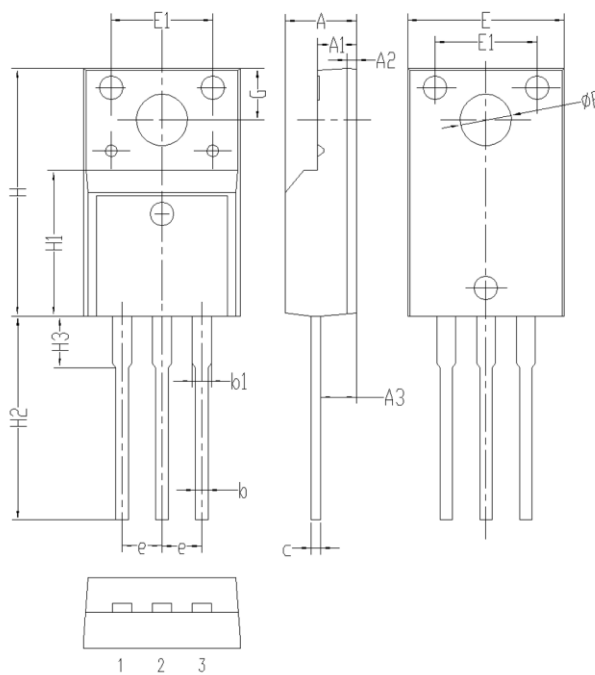


Figure 2. Reverse Characteristic (typ.)

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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