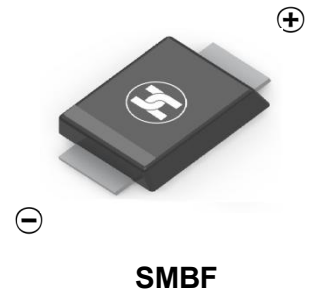


SCHOTTKY BARRIER DIODE

FEATURES

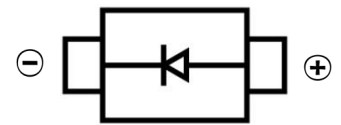
- Surface Mount device
- Low power loss, high efficiency
- High forward surge current capability
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications



SMBF

MECHANICAL DATA

- Case: SMBF
- Case Material: Molded Plastic. UL flammability
- Classification Rating: 94V-0
- Weight: 0.057 grams (approximate)



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

Parameter	Symbol	SS22BF	SS24BF	SS26BF	SS28BF	SS210BF	SS212BF	SS215BF	SS220BF	Unit
Repetitive peak reverse voltage	V_{RRM}	20	40	60	80	100	120	150	200	V
DC Reverse Voltage	V_R	20	40	60	80	100	120	150	200	V
RMS Reverse Voltage	V_{RMS}	14	28	42	56	70	84	105	140	V
Non-Repetitive Peak Forward Surge Current @ $t = 8.3 \text{ ms}$	I_{FSM}	55				45				A
Mean rectifying current	I_F	2.0								A
Thermal Resistance From Junction To Ambient	$R_{\theta JA}$	75								$^\circ\text{C}/\text{W}$
Junction Temperature	T_J	125								$^\circ\text{C}$
Storage Temperature	T_{STG}	-55 ~+150								$^\circ\text{C}$

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

Parameter	Symbol	SS22BF	SS24BF	SS26BF	SS28BF	SS210BF	SS212BF	SS215BF	SS220BF	Unit	Conditions
Forward voltage	V_F	0.55	0.70		0.85		0.95			V	$I_F=2\text{A}$
Reverse current $T=25^\circ\text{C}$	I_R	0.5			0.3					mA	$V=V_R$
Reverse current $T=100^\circ\text{C}$	I_R	5			3					mA	
Junction capacitance	C_J	220			110					pF	$V_R=4\text{V}, f=1\text{MH}$

SCHOTTKY BARRIER DIODE

Typical Characteristics

Fig.1 Forward Current Derating Curve

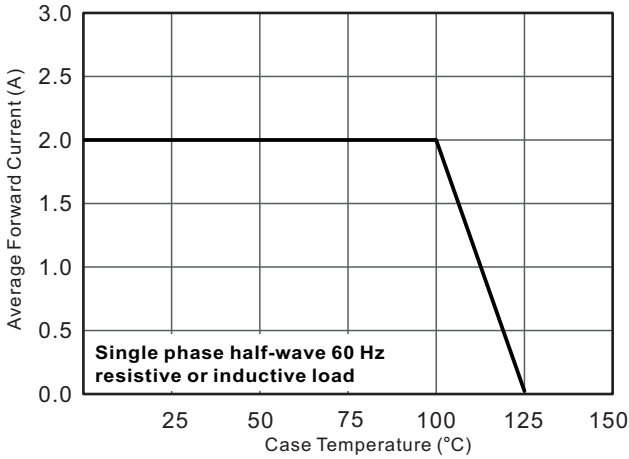


Fig.2 Typical Reverse Characteristics

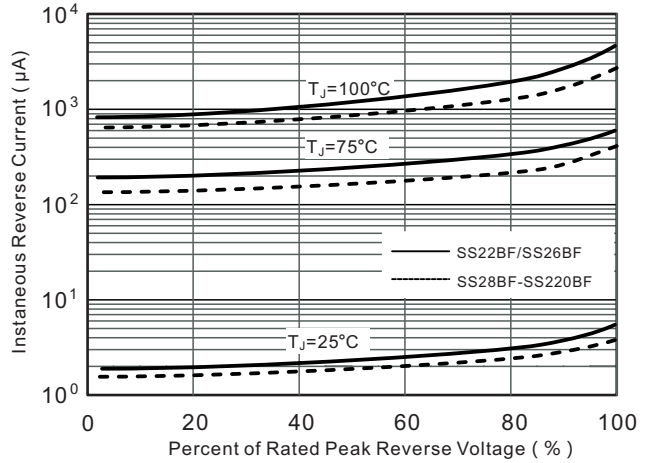


Fig.3 Typical Forward Characteristic

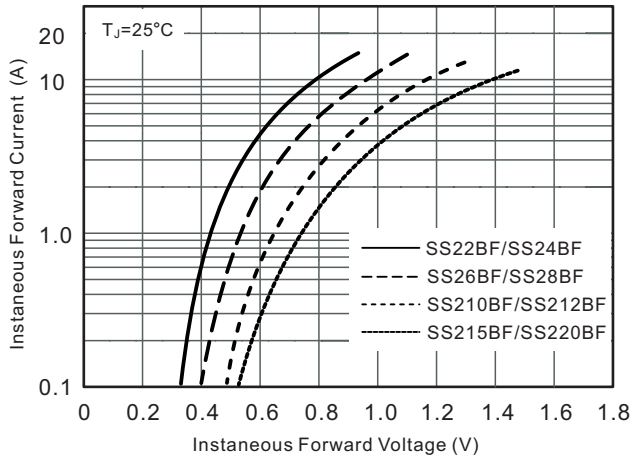


Fig.4 Typical Junction Capacitance

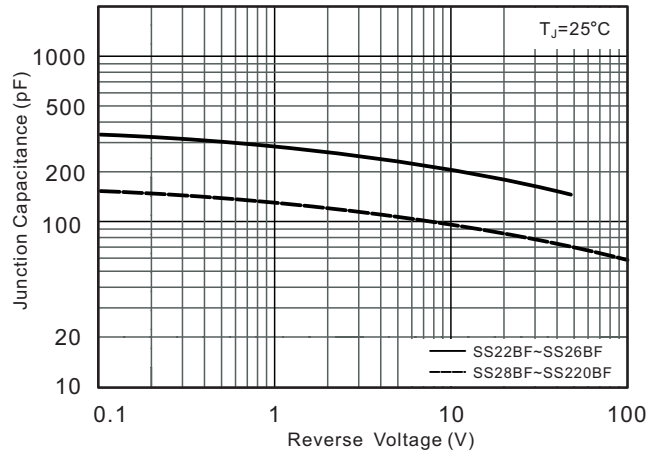


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

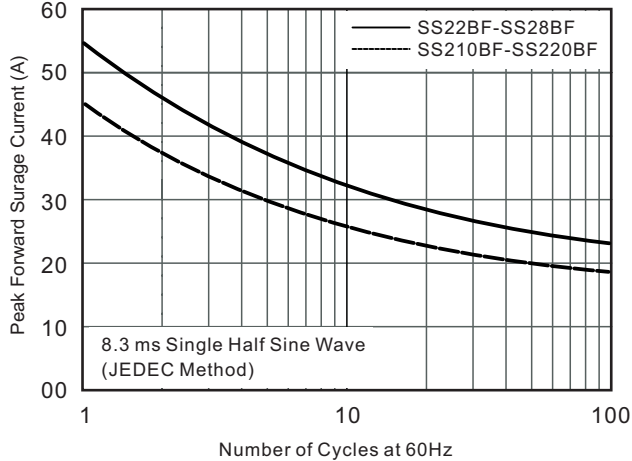
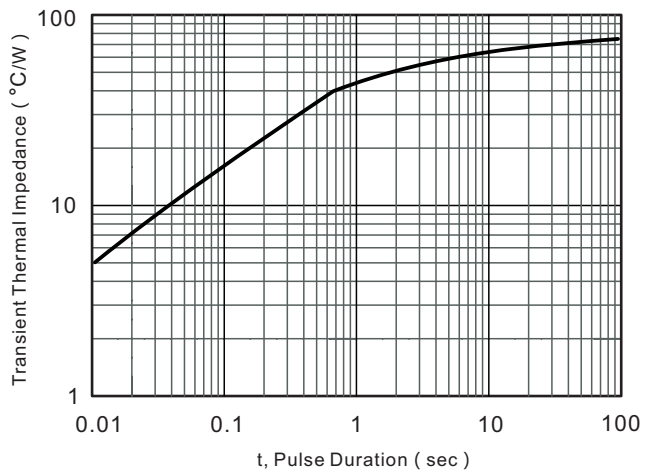
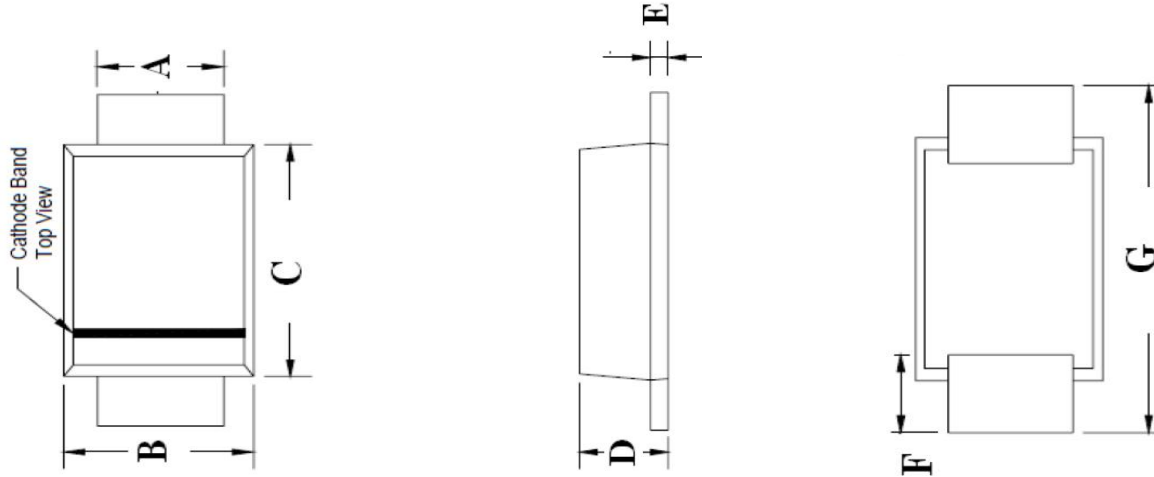


Fig.6- Typical Transient Thermal Impedance



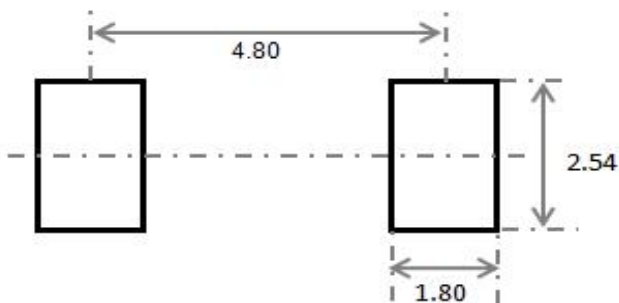
SCHOTTKY BARRIER DIODE

SMBF Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	1.90	2.20	0.075	0.086
B	3.50	3.70	0.094	0.110
C	4.20	4.40	0.165	0.173
D	1.10	1.40	0.043	0.055
E	0.15	0.25	0.006	0.010
F	0.95	1.05	0.038	0.041
G	5.10	5.50	0.200	0.216

SMBF Suggested Pad Layout



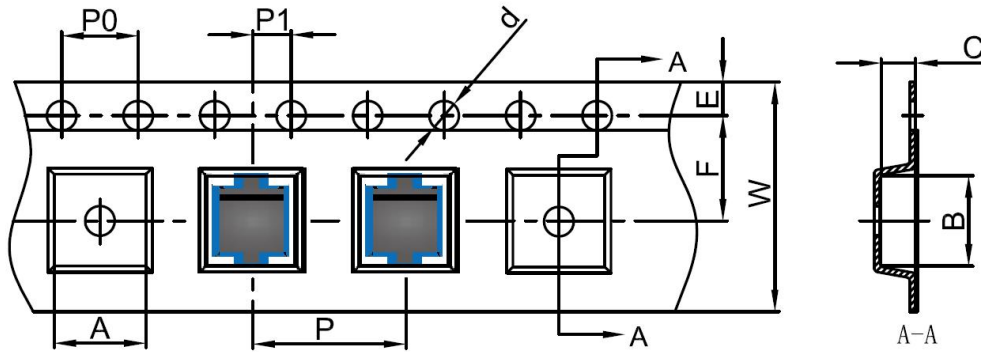
Note:

1. Controlling dimension: in millimeters
2. General tolerance: $\pm 0.05\text{mm}$
3. The pad layout is for reference purposes only

SCHOTTKY BARRIER DIODE

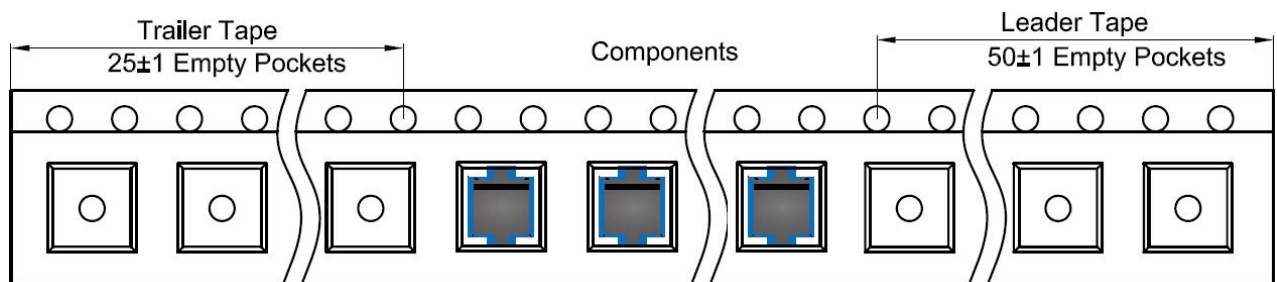
SMBF Tape and Reel

SMBF Embossed Carrier Tape

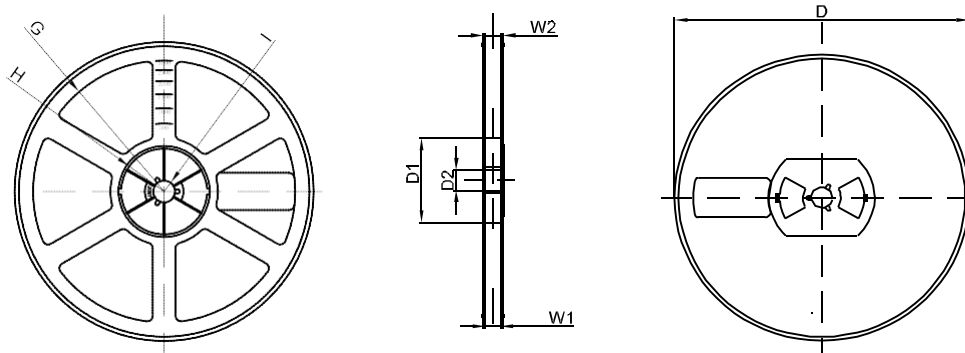


DIMENSIONS ARE IN MILLIMETER										
TYPE	A	B	C	d	E	F	P0	P	P1	W
SMBF	3.80	5.65	1.48	Ø1.50	1.75	5.50	4.00	8.00	2.00	12.00
TOLERANCE	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1

SMBF Tape Leader and Trailer



SMBF Reel



DIMENSIONS ARE IN MILLIMETER								
REEL OPTION	D	D1	D2	G	H	I	W1	W2
13" DIA	Ø330	75.0	13.00	R165	R37.50	R6.50	12.40	17.60
TOLERANCE	±2	±1	±1	±1	±1	±1	±1	±1