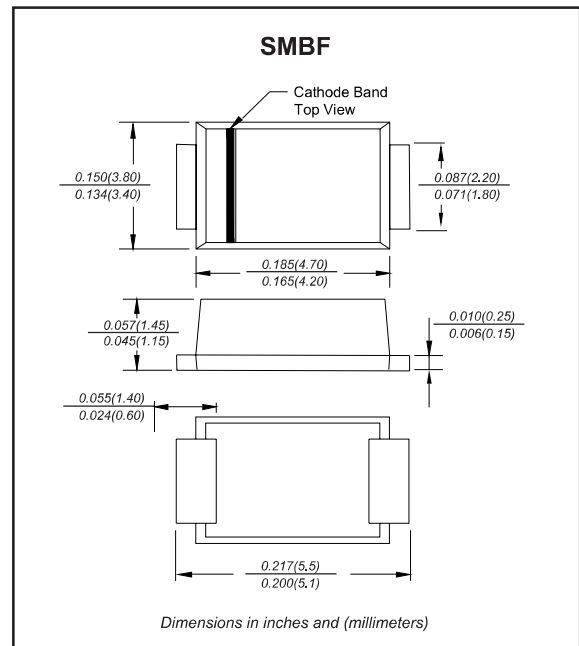


SS34-BF THRU SS320-BF**3.0A Surface Mount Schottky Barrier Rectifiers - 40V-200V****Features**

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ For surface mounted applications
- ◆ Metal silicon junction, majority carrier conduction
- ◆ Low power loss, high efficiency
- ◆ Built-in strain relief, ideal for automated placement
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed: 250°C/10 seconds at terminals
- ◆ Compliant to RoHS Directive 2011/65/EU
- ◆ Compliant to Halogen-free

Mechanical data

- ◆ **Case:** JEDEC SMBF molded plastic body
- ◆ **Terminals:** Solder plated, solderable per MIL-STD-750, Method 2026
- ◆ **Polarity:** Color band denotes cathode end
- ◆ **Mounting Position:** Any

Package outline**Maximum ratings and Electrical Characteristics** (AT $T_A=25^\circ\text{C}$ unless otherwise noted)

PARAMETER	CONDITIONS	Symbol	MIN.	TYP.	MAX.	UNIT
Forward rectified current	See Fig.1	I_O			3.0	A
Forward surge current	8.3ms single half sine-wave (JEDEC methode)	I_{FSM}			80	A
Reverse current	$T_A = 25^\circ\text{C}$	I_R			0.5	mA
	$V_R = 40\text{V} - 60\text{V}$				0.1	
Reverse current	$T_A = 100^\circ\text{C}$	I_R			10	mA
	$V_R = 80\text{V} - 200\text{V}$				5	
Thermal resistance (1)	Junction to Ambient	$R_{\theta JA}$		65		$^\circ\text{C/W}$
	Junction to Case	$R_{\theta JC}$		16		
	Junction to Lead	$R_{\theta JL}$		15		
Diode junction capacitance	f=1MHz and applied 4V DC reverse voltage	C_J		450		pF
Storage temperature		T_{STG}	-65		+150	$^\circ\text{C}$

Note: (1) Device mounted on p.c.b. with 10 mm x 20 mm x 0.1 mm copper pad area.

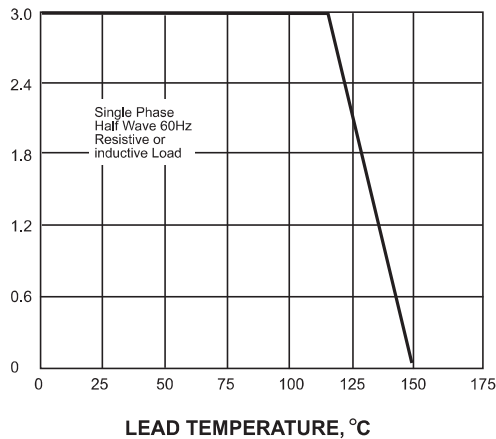
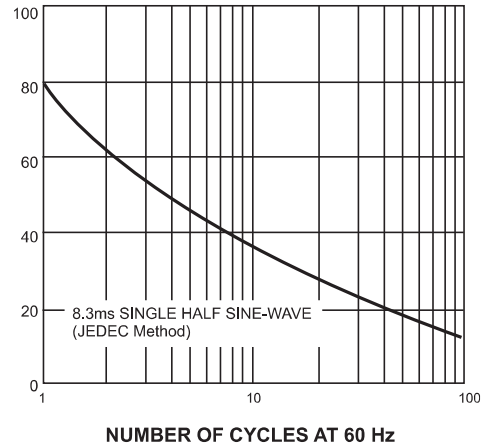
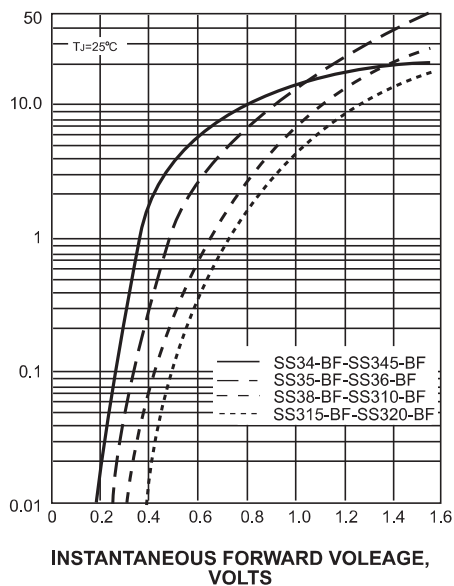
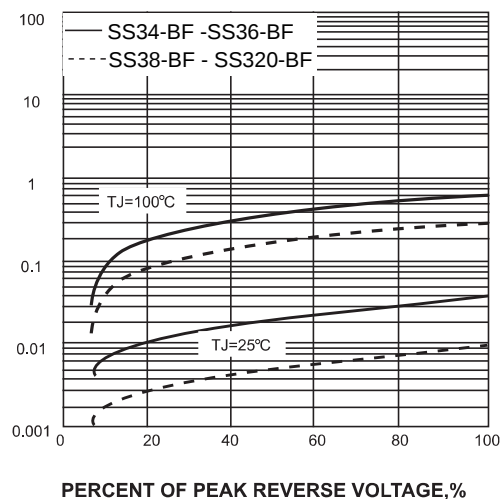
SYMBOLS	V_{RRM}^{*1} (V)	V_{RMS}^{*2} (V)	V_R^{*3} (V)	V_F^{*4} (V)	Operating temperature T_J , (°C)
SS34-BF	40	28	40	0.55	-55 to +150
SS345-BF	45	32	45		
SS35-BF	50	35	50	0.70	
SS36-BF	60	42	60		
SS38-BF	80	56	80	0.85	
SS310-BF	100	70	100		
SS315-BF	150	105	150	0.92	
SS320-BF	200	140	200		

*1 Repetitive peak reverse voltage

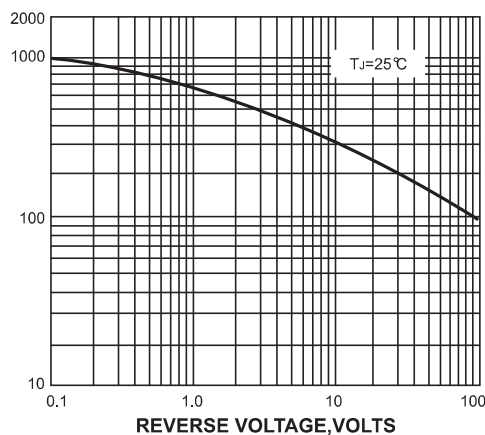
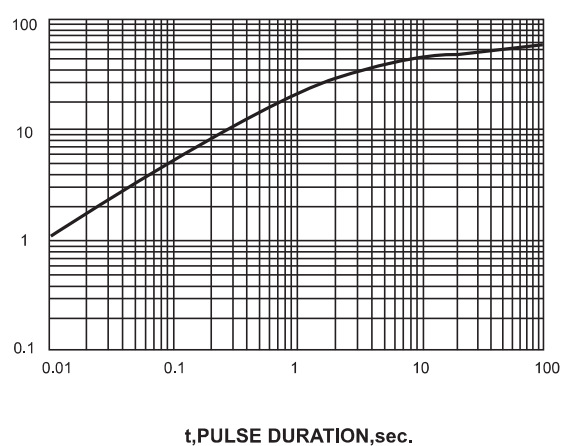
*2 RMS voltage

*3 Continuous reverse voltage

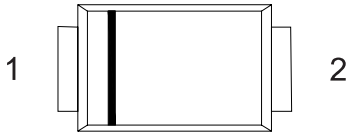
*4 Maximum forward voltage@ $I_F=3.0\text{A}$

Rating and characteristic curvesAVERAGE FORWARD RECTIFIED CURRENT,
AMPERES**FIG. 1- FORWARD CURRENT DERATING CURVE**PEAK FORWARD SURGE CURRENT,
AMPERES**FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**INSTANTANEOUS FORWARD
CURRENT,AMPERES**FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**INSTANTANEOUS REVERSE CURRENT,
MILLIAMPERES**FIG. 4-TYPICAL REVERSE CHARACTERISTICS**

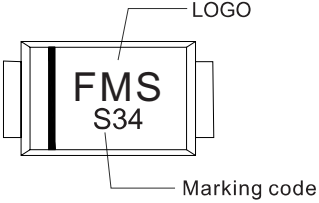
JUNCTION CAPACITANCE, pF

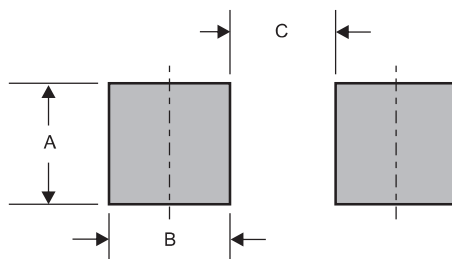
FIG. 5-TYPICAL JUNCTION CAPACITANCETRANSIENT THERMAL IMPEDANCE,
°C/W**FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE**

SS34-BF THRU SS320-BF**Pinning information**

Pin	Simplified outline	Symbol
Pin1 cathode Pin2 anode		

Marking

Type number	Marking code	Example
SS34-BF	S34	
SS345-BF	S345	
SS35-BF	S35	
SS36-BF	S36	
SS38-BF	S38	
SS310-BF	S310	
SS315-BF	S315	
SS320-BF	S320	

Suggested solder pad layout

Dimensions in inches and (millimeters)

PACKAGE	A	B	C
SMBF	0.098 (2.50)	0.071 (1.80)	0.118 (3.00)