Elektronische Bauelemente

SM3200B

Voltage 200 V

3.0 Amp Schottky Barrier Rectifiers

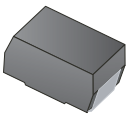
RoHS Compliant Product

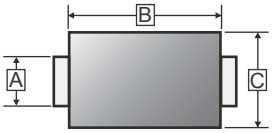
A suffix of "-C" specifies halogen & lead-free

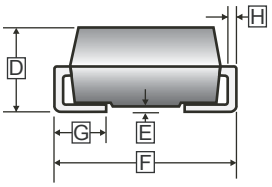
FEATURES

- High Current Capability
- Extremely Low Thermal Resistance
- For Surface Mount Application
- Higher Temp Soldering : 250°C for 10 Seconds at Terminals
- Low Revise Current

SMB







REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	1.91	2.20	E	-	0.203
B	4.06	4.70	F	5.08	5.59
C	3.30	3.94	G	0.76	1.52
D	2.13	2.44	H	0.15	0.305

MECHANICAL DATA

- Case: Molded Plastic
- Epoxy: UL 94V-0 Rate Flame Retardant
- Lead: Axial Leads, Solderable per MIL-STD-202 method 208 Guaranteed
- Polarity: Color Band Denotes Cathode End
- Mounting Position: Any

PACKAGE INFORMATION

Package	MPQ	Leader Size
SMB	3K	13' inch

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Rating 25°C ambient temperature unless otherwise specified. Single phase half wave, 60Hz, resistive or inductive load. For capacitive load, de-rate current by 20%.)

Parameter		Symbol	Rating	Unit
Peak Repetitive Peak reverse voltage		V_{RRM}	200	V
Working Peak Reverse Voltage		V_{RWM}	200	V
Maximum DC Blocking Voltage		V_R	200	V
Average Forward Current @T_J=25°C		$I_{F(AV)}$	3	A
Peak Forward Current @ 8.3 ms Half Sine		I_{FSM}	90	A
Maximum Instantaneous Forward Voltage	I_{FM} = 3.0 A, T_A = 25°C	V_F	0.85	V
	I_{FM} = 3.0 A, T_A = 75°C		0.75	
	I_{FM} = 3.0 A, T_A = 125°C		0.68	
Maximum DC Reverse Current At Rated DC Blocking Voltage [2]	T_J = 25°C	I_R	5	μA
	T_J = 100°C		80	
Typical Junction Capacitance [1]		C_J	60	pF
Typical Thermal Resistance [3]		$R_{\theta JA}$	50	°C / W
Typical Thermal Resistance [4]		$R_{\theta JC}$	25	°C / W
Voltage Rate of Chance (Rated V_R)		dv / dt	10000	V / μs
Operating Temperature Range		T_J	-50~150	°C
Storage temperature		T_{STG}	-65~150	°C

Notes:

1. Measured at 1MHz and applied reverse voltage of 5.0 V D.C.
2. Pulse test: 300μs pulse width, 1% duty cycle.
3. Thermal Resistance Junction to Ambient.
4. Thermal Resistance Junction to Case.

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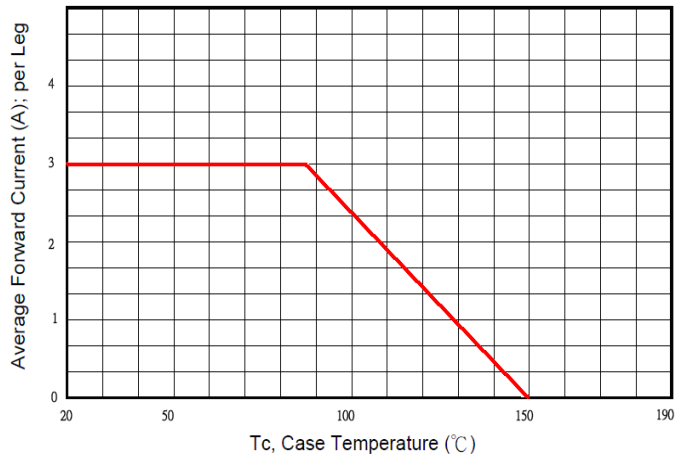
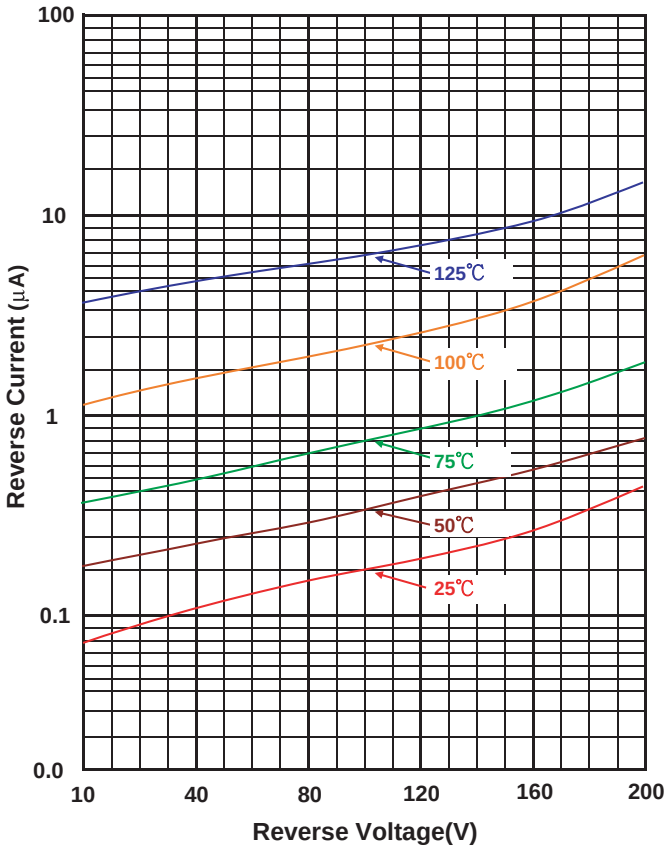
RATINGS AND CHARACTERISTIC CURVES

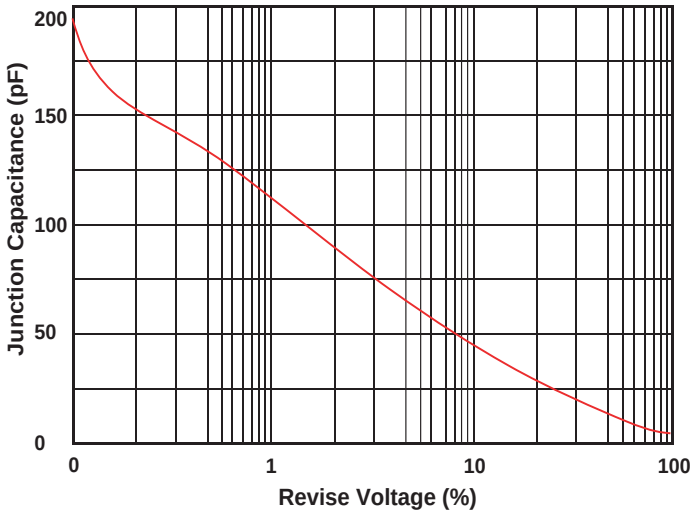
Typical Forward Current Derating Curve



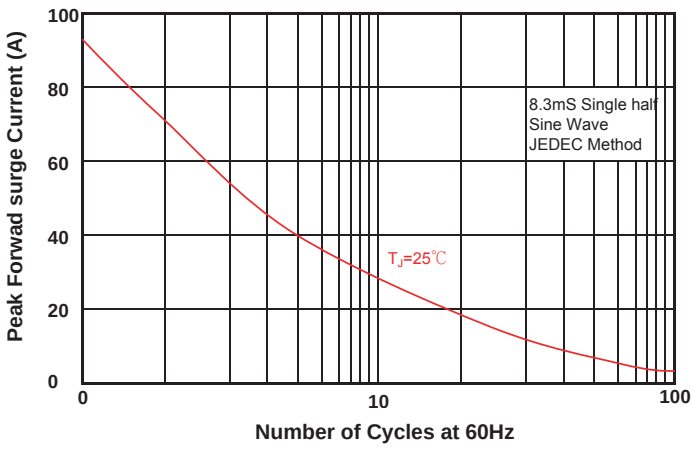
Typical Reverse Characteristic



Typical Junction Capacitance



Maximum Non- Repetitive Forward Surge Current



Typical Forward Characteristic