Elektronische Bauelemente

SM120B-C~SM1100B-C

Voltage 20V~100V

1.0 Amp Surface Mount Schottky Barrier Rectifiers

RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

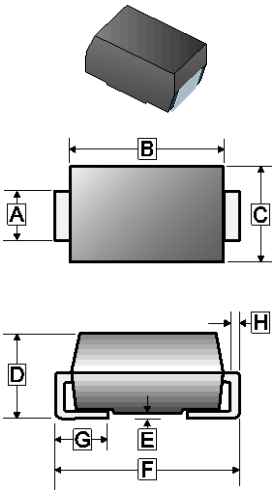
FEATURES

- Ideal for Surface Mount Applications
- Easy Pick and Place
- Built-in Strain Relief
- Low Forward Voltage Drop

MECHANICAL DATA

- Case: Molded Plastic
- Epoxy: UL 94V-0 Rate Flame Retardant
- Metallurgically Bonded Construction
- Polarity: Color Band Denotes Cathode End
- Mounting Position: Any

SMB



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	1.85	2.20	E	-	0.25
B	4.00	4.85	F	5.05	5.59
C	3.25	3.94	G	0.75	1.55
D	1.90	2.61	H	0.15	0.31

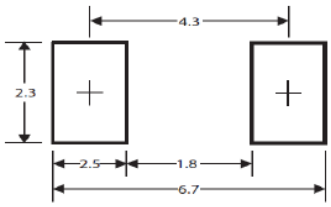
PACKAGE INFORMATION

Package	MPQ	Leader Size
SMB	3K	13 inch

ORDER INFORMATION

Part Number	Type
SM120B-C~SM1100B-C	Lead (Pb)-free and Halogen-free

Mounting Pad Layout



*Dimensions in millimeters

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	Part Number				Unit
			SM120B-C	SM140B-C	SM160B-C	SM1100B-C	
Maximum Recurrent Peak Reverse Voltage		V_{RRM}	20	40	60	100	V
Working Peak Reverse Voltage		V_{RSM}	20	40	60	100	V
Maximum DC Blocking Voltage		V_{DC}	20	40	60	100	V
Maximum Average Forward Current See Fig. 1		I_F	1				A
Peak Forward Surge Current @8.3ms single half sine-wave superimposed on rated load (JEDEC method)		I_{FSM}	35				
Maximum Instantaneous Forward Voltage @1A		V_F	0.45	0.52	0.65	0.83	V
Maximum DC Reverse Current @Rated DC Blocking Voltage	T_A=25°C	I_R	0.1				mA
	T_A=100°C		6				
Typical Junction Capacitance [1]		C_J	110				pF
Thermal Resistance Junction-Ambient		$R_{\theta JA}$	50				°C/W
Operating Temperature Range		T_J	-55~125		-55~150		°C
Storage Temperature Range		T_{STG}	-65~175				

Note:
1. Measured at 1MHz and applied reverse voltage of 4V D.C.

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RATINGS AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

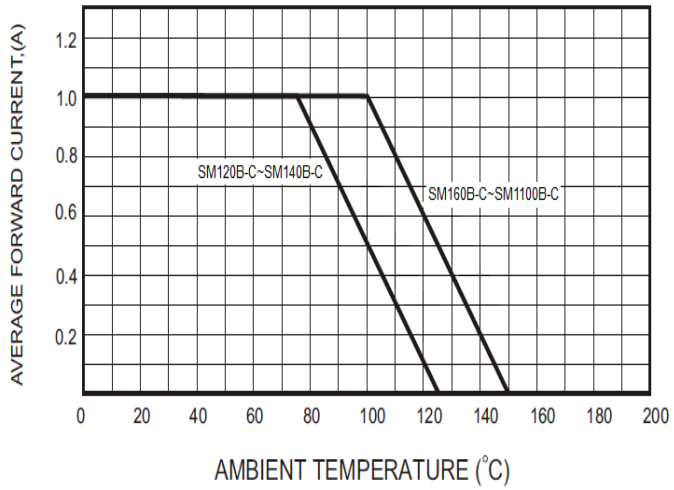

FIG.2-TYPICAL FORWARD CHARACTERISTICS

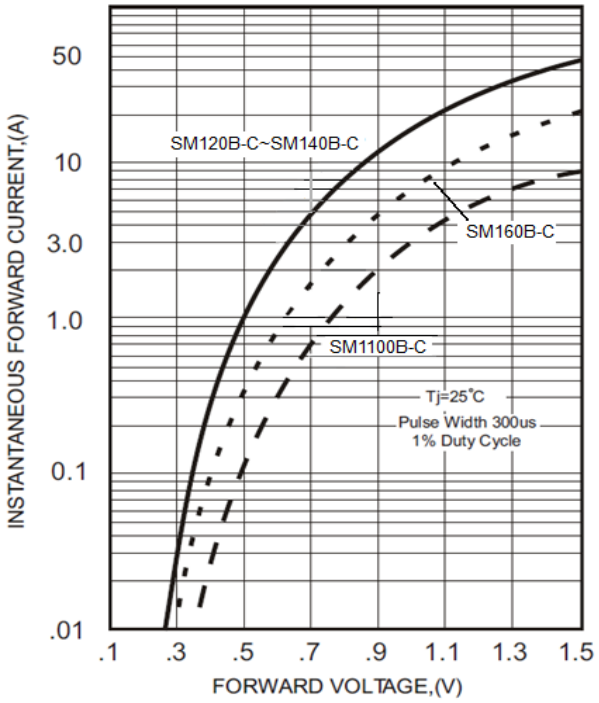

FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

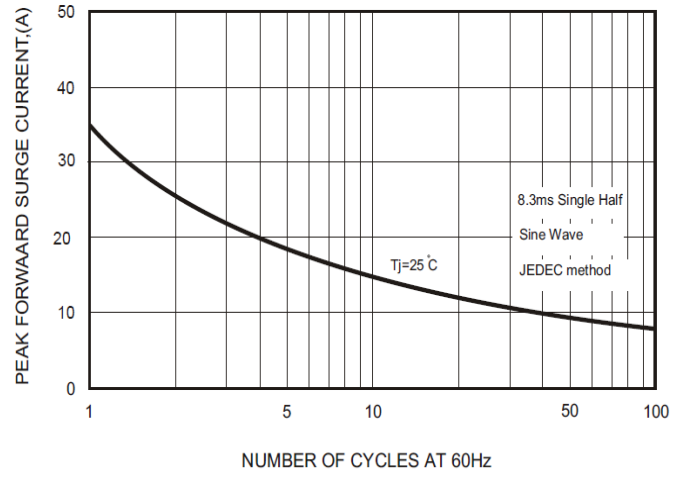

FIG.4-TYPICAL JUNCTION CAPACITANCE

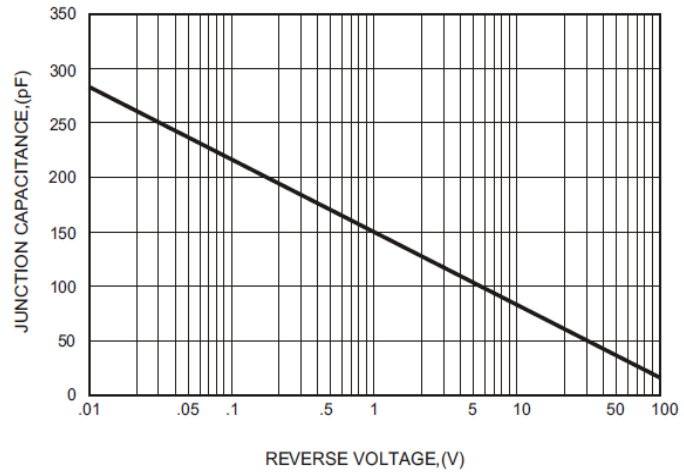

FIG.5 - TYPICAL REVERSE CHARACTERISTICS