Elektronische Bauelemente

SM120B THRU SM1100B

VOLTAGE 20V ~ 100V

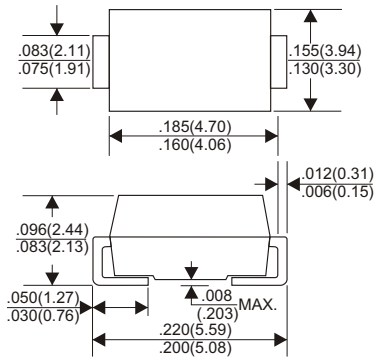
1.0AMP Surface Mount Schottky Barrier Rectifiers

RoHS Compliant Product

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



DO-214AA(SMB)



Dimensions in inches and (millimeters)

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
* Weight: 0.102 grams

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, derate current by 20%.

TYPE NUMBER	SM120B	SM140B	SM160B	SM1100B	UNITS
Maximum Recurrent Peak Reverse Voltage	20	40	60	100	V
Working Peak Reverse Voltage	20	40	60	100	V
Maximum DC Blocking Voltage	20	40	60	100	V
Maximum Average Forward Rectified Current See Fig. 1	1.0				A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	35				A
Maximum Instantaneous Forward Voltage at 1.0A	0.45	0.52	0.65	0.83	V
Maximum DC Reverse Current Ta=25°C	0.1				mA
at Rated DC Blocking Voltage Ta=100°C	6				mA
Typical Junction Capacitance (Note1)	110				pF
Typical Thermal Resistance RθJA (Note 2)	50				°C/W
Operating Temperature Range T_J	-50 ~ +150				°C
Storage Temperature Range T_{STG}	-65 ~ +175				°C

NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

2. Thermal Resistance Junction to Ambient.

Elektronische Bauelemente

SM120B THRU SM1100B

VOLTAGE 20V ~ 100V

1.0AMP Surface Mount Schottky Barrier Rectifiers

RATING AND CHARACTERISTIC CURVES (SM120B THRU SM1100B)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

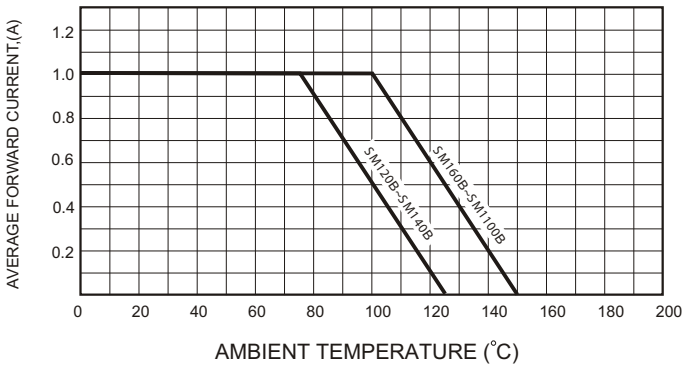


FIG.2-TYPICAL FORWARD CHARACTERISTICS

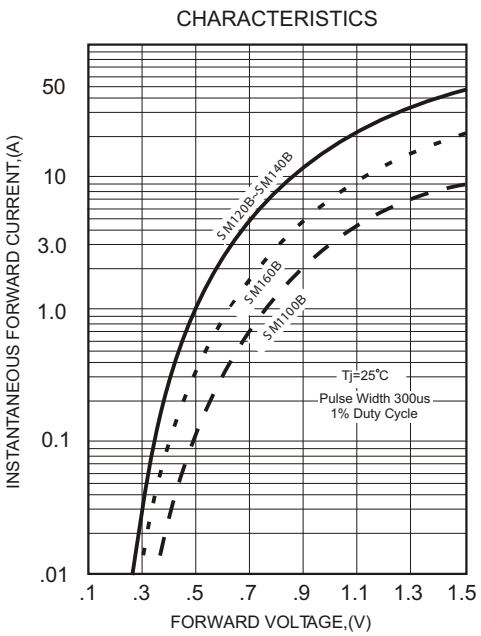


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

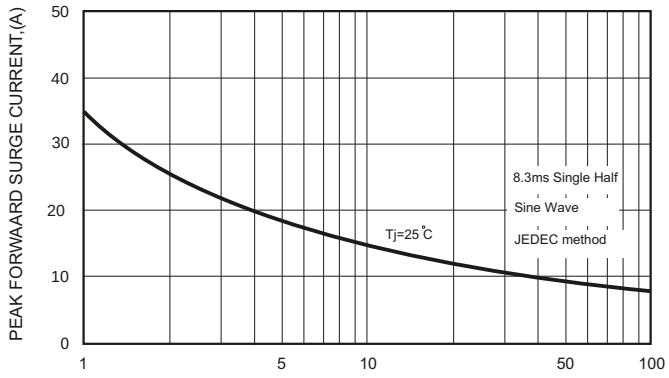


FIG.4-TYPICAL JUNCTION CAPACITANCE

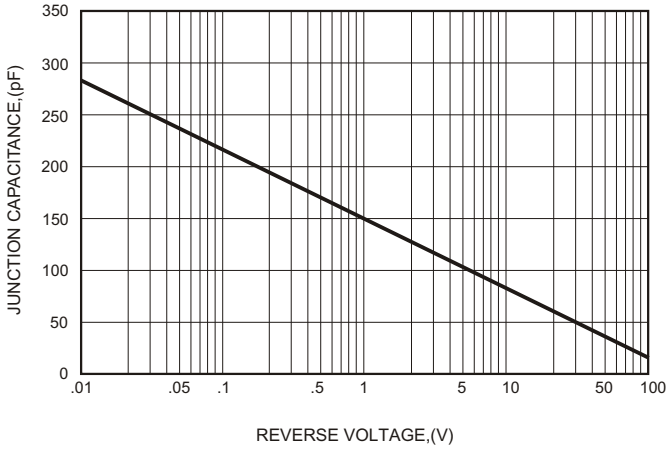


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

