

### Surface Mount Schottky Barrier Rectifiers

#### Features:

- \*Schottky Barrier Chip
- \*Ideally Suited for Automatic Assembly
- \*Low Power Loss, High Efficiency
- \*Surge Overload Rating to 30A Peak
- \*For Use in Low Voltage, High Frequency Inverters, Free Wheeling, and Polarity Protection Application

**REVERSE VOLTAGE**  
**70 TO 100 VOLTS**  
**FORWARD CURRENT**  
**1.0 AMPERE**



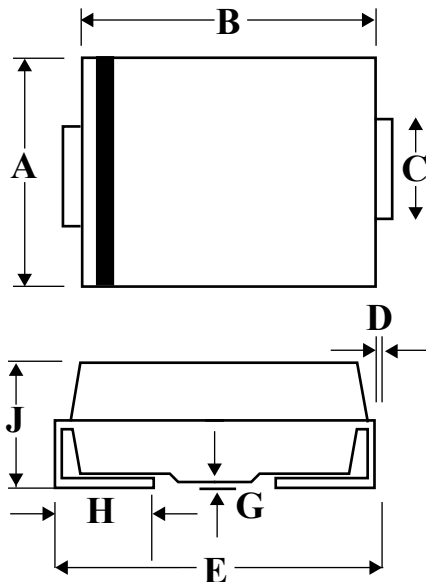
**SMA(DO-214AC)**

#### Mechanical Data

- \*Case : Molded Plastic
- \*Plastic Material: UL Flammability Classification Rating 94V-0
- \*Terminals: Solder Plated Terminal Solderable per MIL-STD-202, Method 208
- \*Polarity: Cathode Band
- \*Mounting Position: Any
- \*Weight: 0.064 grams(approx)

### SMA Outline Dimension

Unit:mm



SMA		
Dim	Min	Max
A	2.20	2.92
B	4.00	4.60
C	1.27	1.63
D	0.15	0.31
E	4.48	5.59
G	0.10	0.20
H	0.76	1.52
J	1.70	2.62

**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%.

Characteristic	Symbol	B170	B180	B190	B1100	Unit
Maximum Recurrent Peak Reverse Voltage	VRRM	70	80	90	100	V
Maximum RMS Voltage	VRMS	49	56	63	70	V
Maximum DC Blocking Voltage	VDC	70	80	90	100	V
Maximum Average Forward Rectified Current @TC=125°C	IF(AV)	1.0				A
Peak Forward Surge Current, 8.3 ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	IFSM	30				A
Maximum Instantaneous At 1.0A DC	VF	0.79				V
Maximum DC Reverse Current @Tj=25 °C At Rated DC Blocking Voltage @Tj=100 °C	IR	0.5 50				mA
Typical Junction Capacitance (Note 1)	CJ	80				Pf
Typical Thermal Resistance (Note 2)	RθJL	30				°C/W
Operating Temperature Range	TJ	-55 to+125				°C
Storage Temperature Range	TSTG	-55 to+150				°C

NOTES:1.Measured at 1.0MHz applied reverse voltage of 4.0V DC.

2.Thermal Resistance Junction to case.

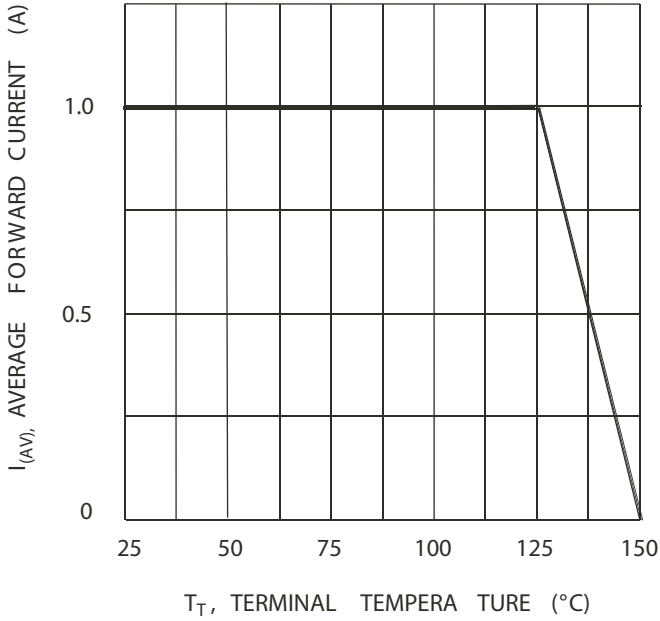


FIG.1 Forward Current Derating Curve

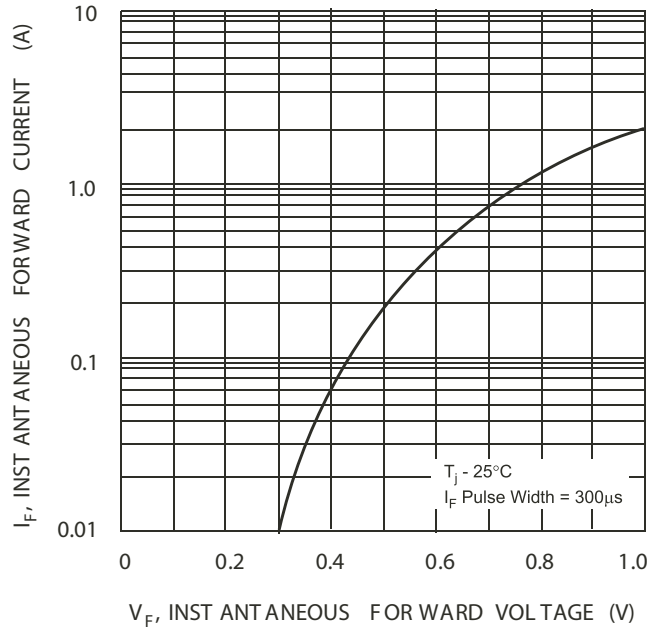


FIG.2 Typical Forward Characteristics

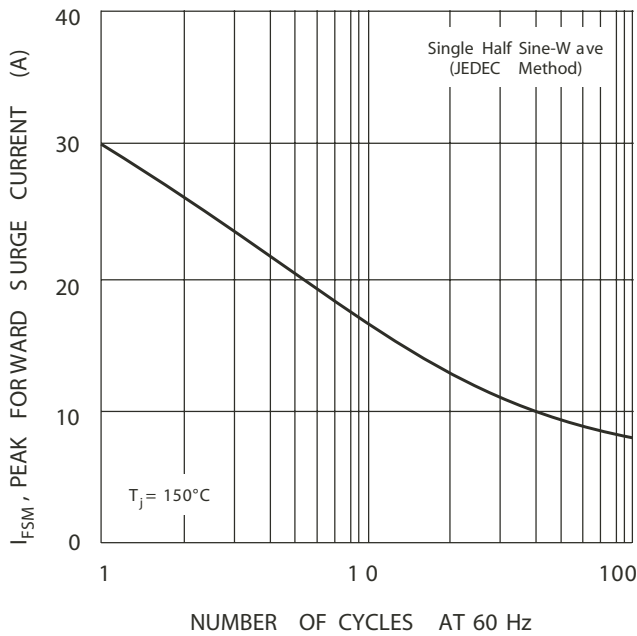


FIG.3 Max Non-Repetitive Peak Forward Surge Current

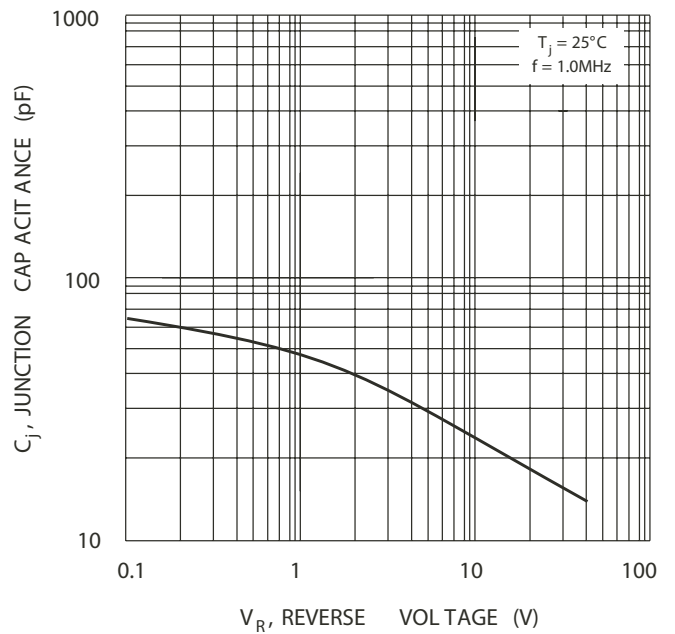


FIG.4 Typical Junction Capacitance