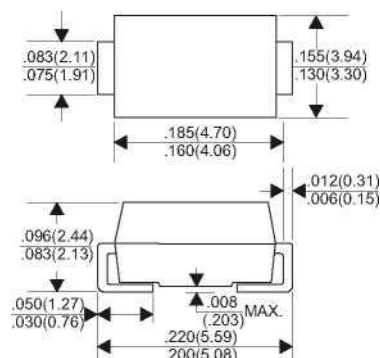


## SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

### 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

DO-214AA(SMB)



Dimensions in inches and (millimeters)

### Mechanical Data

Case : JEDEC DO-214AC/SMA molded plastic body  
Terminals : Solderable per MIL-STD-750, Method 2026  
Polarity : Color band denotes cathode end Mounting  
Position : Any  
Weight : 0.003 ounce, 0.093 grams

### MARKING DIAGRAMS



### ORDERING INFORMATION

Device	Package	Shipping <sup>†</sup>
SS54	SMB (Pb-Free)	3000 / Tape & Reel

### MAXIMUM RATINGS

TYPE NUMBER	SSB43L-E3-52T	UNITS
Maximum Recurrent Peak Reverse Voltage	40	V
Maximum RMS Voltage	28	V
Maximum DC Blocking Voltage	40	V
Maximum Average Forward Rectified Current See Fig. 1	5.0	A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	120	A
Maximum Instantaneous Forward Voltage at 5.0A	0.44	V
Maximum DC Reverse Current Ta=25° C	0.2	mA
at Rated DC Blocking Voltage Ta=100 °C	50	mA
Typical Junction Capacitance (Note1)	380	pF
Typical Thermal Resistance R JA (Note 2)	70	°C/W
Operating Temperature Range Tj	-55 — +125	°C
Storage Temperature Range Tstg	-55 — +150	°C

## NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Unit mounted on PC board with 5.0mmX 5.0 mm (0.013 mm thick) copper pads on heat sink

RATING AND CHARACTERISTIC CURVES

FIG.1-FORWARD CURRENT DERATING CURVE

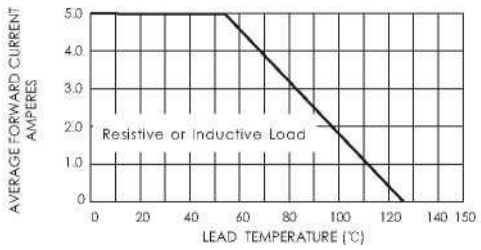


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

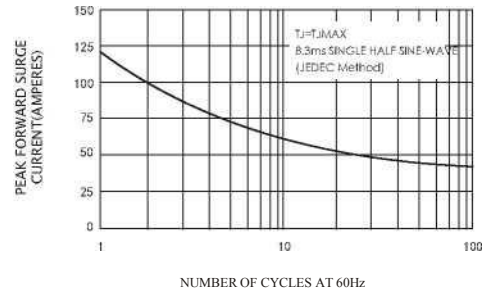


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

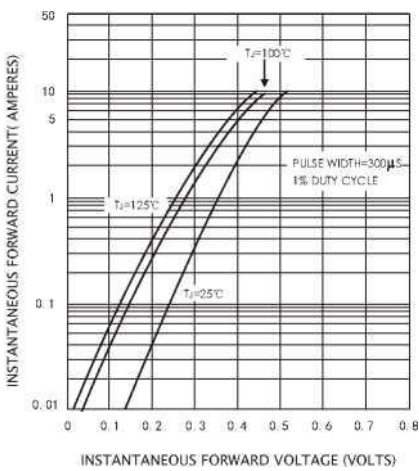


FIG.4-TYPICAL REVERSE CHARACTERISTICS

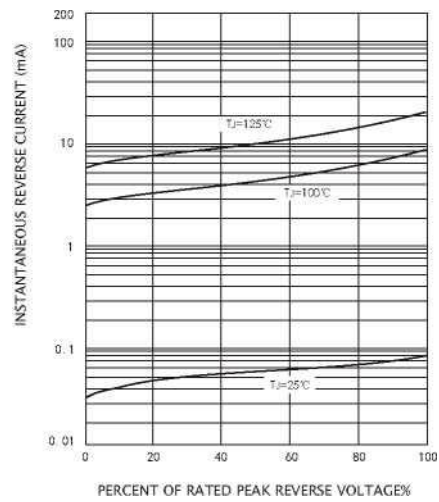


FIG.5-TYPICAL JUNCTION CAPACITANCE

