

SB345-A

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE: 45V

CURRENT: 3.0A

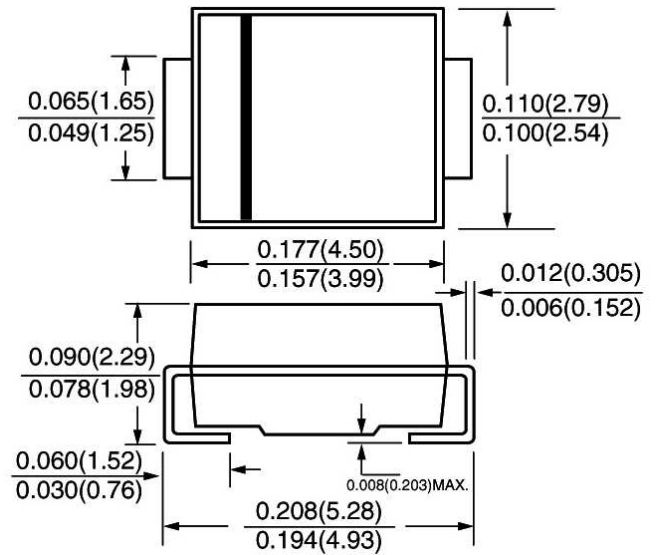
FEATURE

Plastic package has Underwriters Laboratory Flammability Classification 94V-0
For surface mounted applications
Low profile package
Built-in strain relief
Low power loss, high efficiency
High current capability, low forward voltage drop
High surge capability
For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
Guard ring for over voltage protection
High temperature soldering guaranteed:
250°C /10 seconds at terminals

MECHANICAL DATA

Case: JEDEC DO-214AC molded plastic body
Terminals: Solder plated, solder able per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode end

SMA/DO--214AC



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half-wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated,
for capacitive load, derate current by 20%)

| | SYMBOL | SB345-A | units |
|---|-----------------------------------|-------------|-------|
| Maximum Recurrent Peak Reverse Voltage | V _{rrm} | 45 | V |
| Maximum RMS Voltage | V _{rms} | 31.5 | V |
| Maximum DC blocking Voltage | V _{dc} | 45 | V |
| Maximum Average Forward Rectified Current | I _{f(av)} | 3.0 | A |
| Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load | I _{fsm} | 100.0 | A |
| Maximum Forward Voltage at rated Forward current (Note 1) | V _f | 0.5 | V |
| Maximum DC Reverse Current at rated DC blocking voltage Ta =25°C Ta =100°C | I _r | 0.5 10.0 | mA |
| Typical Thermal Resistance (Note 2) | R _{th(ja)} | 55.0 | °C /W |
| Storage and Operating Temperature Range | T _j , T _{stg} | -55 to +150 | °C |

NOTE:

1. Pulse test: 300μs pulse width, 1% duty cycle
2. P.C.B. mounted with 0.2 x 0.2inches (5.0 x 5.0mm) copper pad areas

RATINGS AND CHARACTERISTIC CURVES SB345-A

FIG.1 - FORWARD CURRENT DERATING CURVE

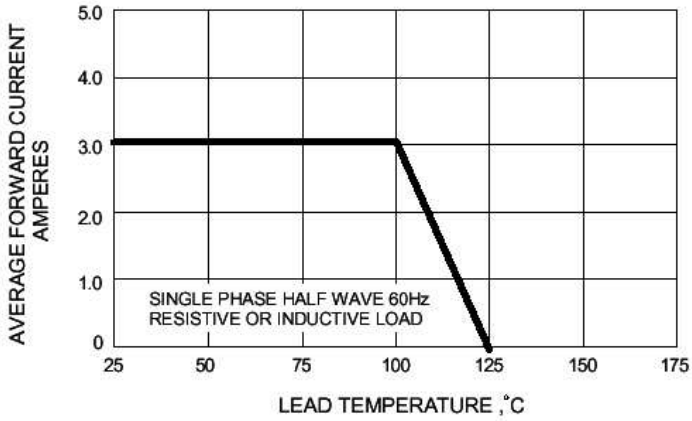


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

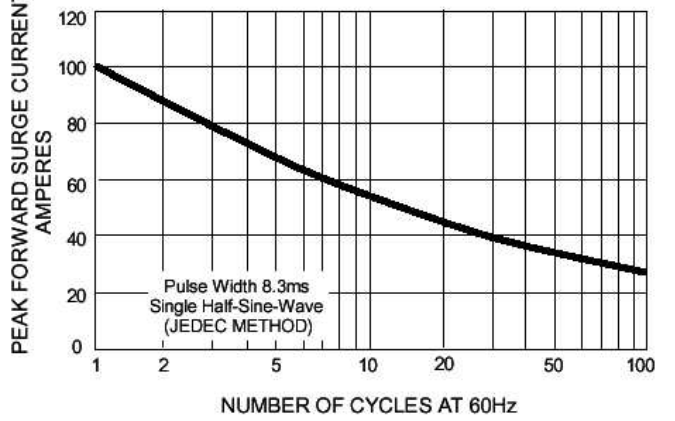


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

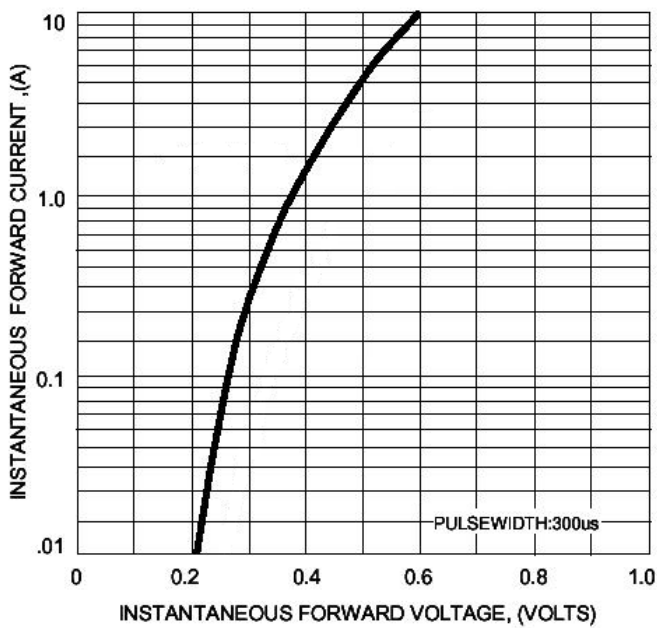


FIG.4 - TYPICAL JUNCTION CAPACITANCE

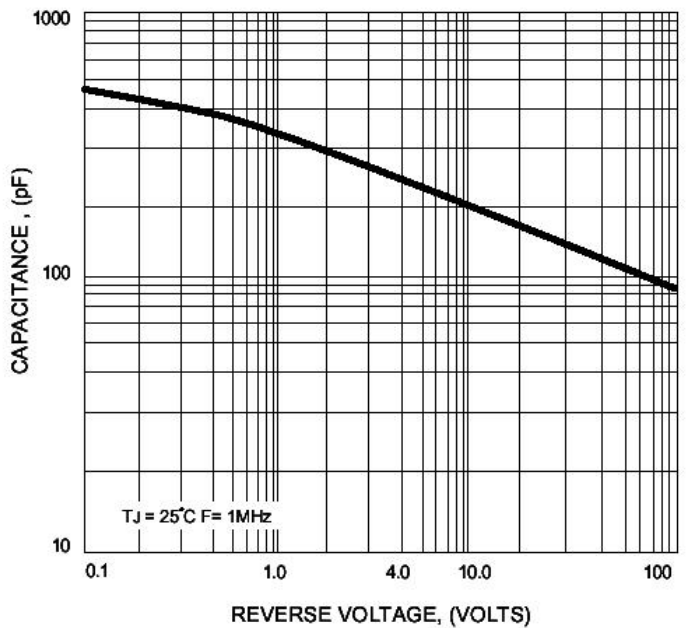


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

