

10BQ100

PRV : 100 Volts
I_o : 1.0 Amperes

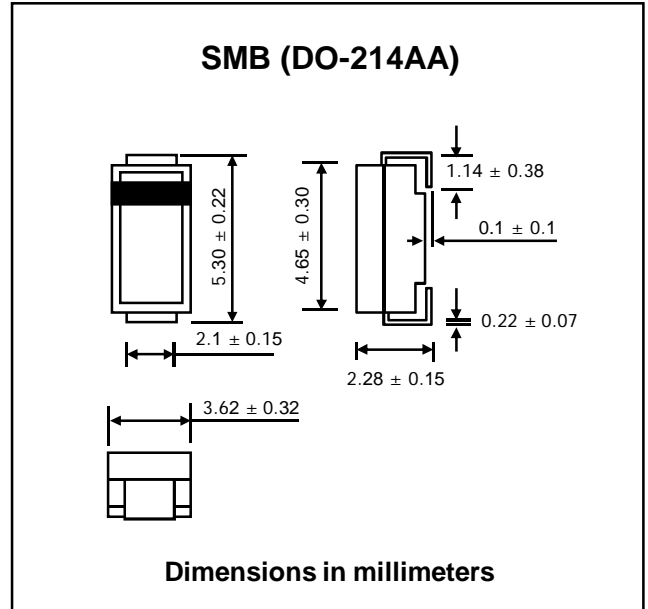
FEATURES :

- * High current capability
- * High surge current capability
- * High reliability
- * High efficiency
- * Low power loss
- * Low cost
- * Low forward voltage drop
- * Pb / RoHS Free

MECHANICAL DATA :

- * Case : SMB Molded plastic
- * Epoxy : UL94V-O rate flame retardant
- * Lead : Lead Formed for Surface Mount
- * Polarity : Color band denotes cathode end
- * Mounting position : Any
- * Weight : 0.1079 gram

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.
 Single phase, half wave, 60 Hz, resistive or inductive load.
 For capacitive load, derate current by 20%.

| RATING | SYMBOL | VALUE | UNIT |
|---|--------------------|----------------------------|------|
| Maximum Recurrent Peak Reverse Voltage | V _{RRM} | 100 | V |
| Maximum RMS Voltage | V _{RMS} | 70 | V |
| Maximum DC Blocking Voltage | V _{DC} | 100 | V |
| Maximum Average Forward Current , T _c = 152 °C | I _{F(AV)} | 1.0 | A |
| Maximum Peak Forward Surge Current, 8.3ms single half sine wave superimposed on rated load (JEDEC Method) | I _{FSM} | 45 | A |
| Maximum Forward Voltage | V _F | at I _F = 1.0 A. | 0.78 |
| | | at I _F = 2.0 A. | 0.89 |
| Maximum Reverse Current at Rated DC Blocking Voltage , T _J = 25 °C | I _R | 0.5 | mA |
| Junction Temperature Range | T _J | - 55 to + 175 | °C |
| Storage Temperature Range | T _{STG} | - 55 to + 175 | °C |

Note :

(1) Pulse Test : Pulse Width = 300 μs, Duty Cycle = 2%.



RATING AND CHARACTERISTIC CURVES (10BQ100)

FIG.1 - FORWARD CURRENT DERATING CURVE

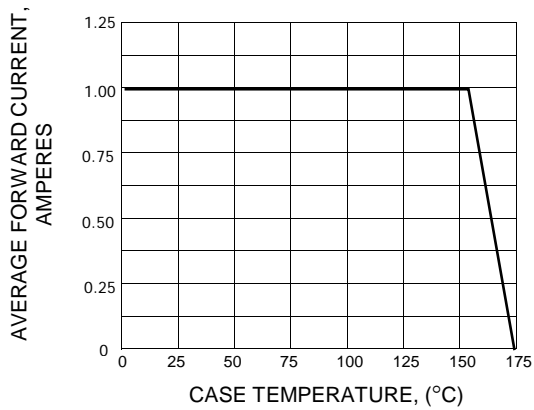


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

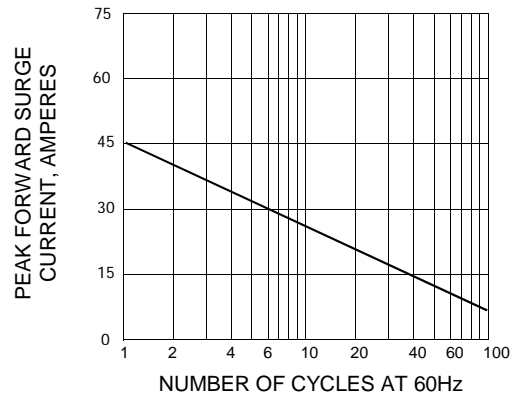


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

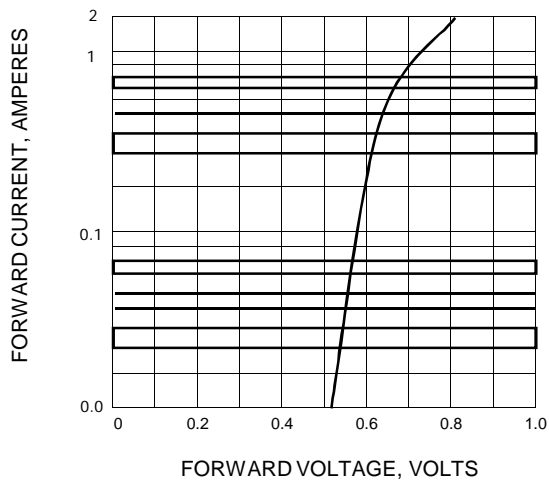


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

