

10BQ100

PRV : 100 Volts
I_o : 1.0 Amperes

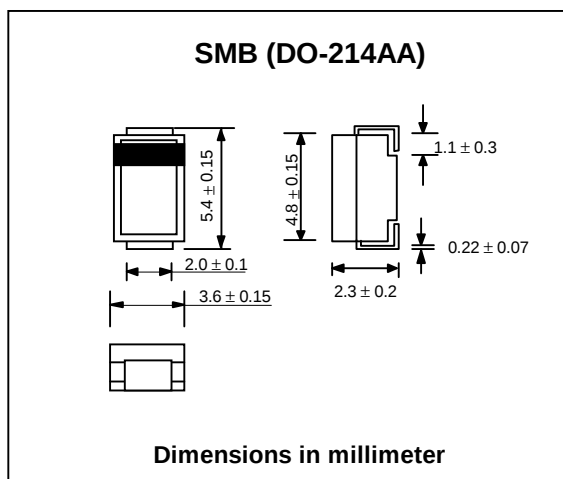
FEATURES :

- * 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 , $T_c = 152\text{ }^{\circ}\text{C}$	$I_{F(AV)}$	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	at $I_F = 1.0\text{ A.}$	0.78	V
	at $I_F = 2.0\text{ A.}$	0.89	
Maximum Reverse Current at Rated DC Blocking Voltage , $T_J = 25\text{ }^{\circ}\text{C}$	I_R	0.5	mA
Junction Temperature Range	T_J	- 55 to + 175	$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	- 55 to + 175	$^{\circ}\text{C}$

Note :

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

RATING AND CHARACTERISTIC CURVES (10BQ100)

FIG.1 - FORWARD CURRENT DERATING CURVE

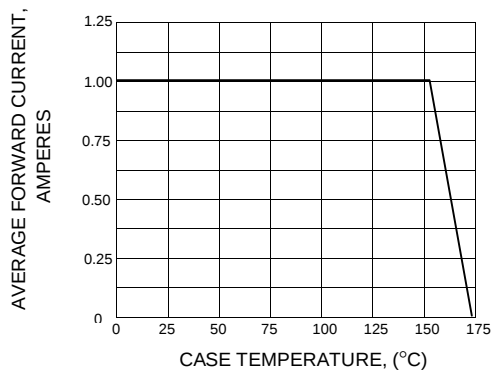


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

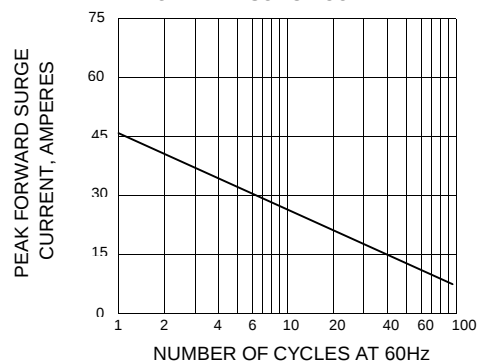


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

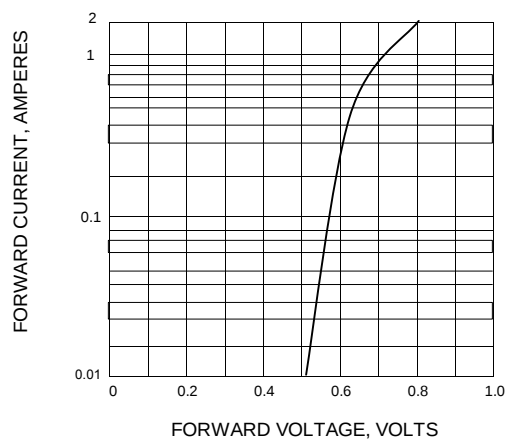


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

