

# 10BQ100

Surface Mount Schottky Barrier Rectifiers

**REVERSE VOLTAGE: 100 V**

**FORWARD CURRENT: 1.0 A**



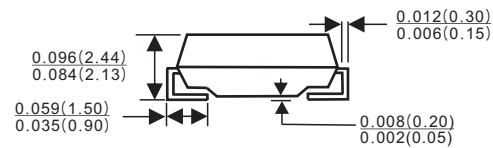
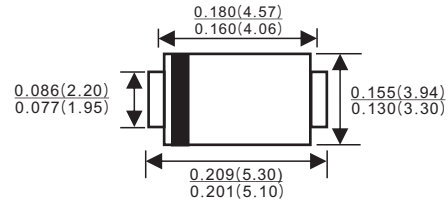
## Features

- ◇ Schottky barrier rectifier
- ◇ Guardring protection
- ◇ Low forward voltage
- ◇ Reverse energy tested
- ◇ High current capability
- ◇ Extremely low thermal resistance

## Mechanical Data

- ◇ Case: SMB molded plastic body
- ◇ Polarity: Color band denotes cathode end
- ◇ Mounting position: ANY
- ◇ Weight: 0.003 ounces, 0.093 gram

## SMB/DO-214AA



Dimensions in inches and(millimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

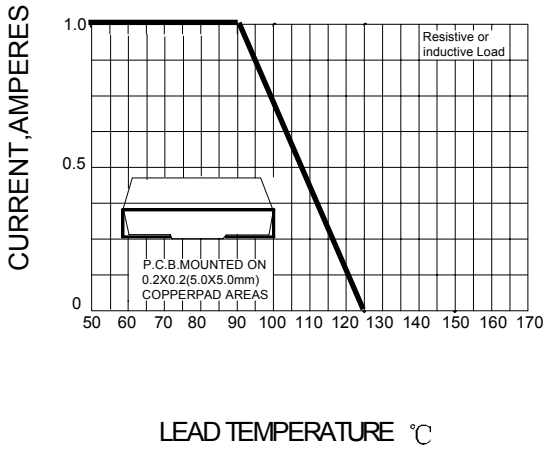
Ratings at 25°C ambient temperature unless otherwise specified

		10BQ100	UNITS
Maximum repetitive peak reverse voltage	$V_{RRM}$	100	V
Maximum RMS voltage	$V_{RWS}$	70	V
Maximum DC blocking voltage	$V_{DC}$	100	V
Maximum average forward rectified current at $T_L=90^\circ\text{C}$	$I_{F(AV)}$	1.0	A
Peak forward surge current 8.3ms single half-sine-wave	$I_{FSM}$	40	A
Maximum instantaneous forward voltage at $I_{FM}=1.0\text{A}$ (NOTE1)	$V_F$	0.85	V
Maximum DC reverse current $T_J=25^\circ\text{C}$ at rated DC blocking voltage $T_J=125^\circ\text{C}$	$I_R$	0.5 5.0	m A
Maximum thermal resistance	$R_{\theta JL}$	28	$^\circ\text{C/W}$
Operating temperature range	$T_J$	-55 ---- +125	$^\circ\text{C}$
Storage temperature range	$T_{STG}$	-55 ---- +150	$^\circ\text{C}$

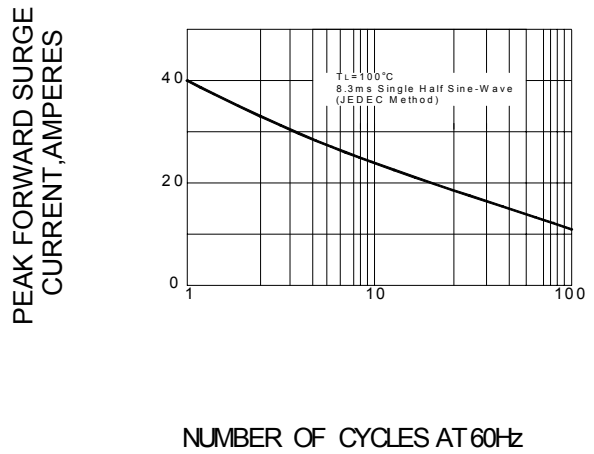
NOTE: 1.Pulse test: Pulse width 300us,duty cycle 1 %

## Ratings AND Characteristic Curves

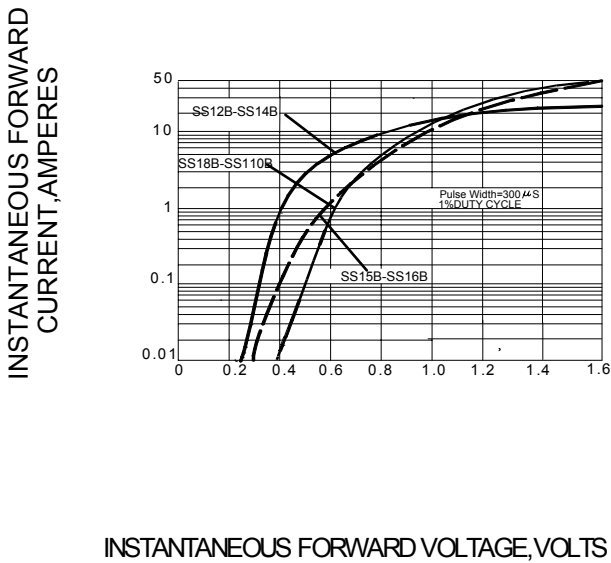
**FIG.1 – FORWARD DERATING CURVE**



**FIG.2 – PEAK FORWARD SURGE CURRENT**



**FIG.3 – TYPICAL FORWARD CHARACTERISTICS**



**FIG.4 – TYPICAL REVERSE CHARACTERISTICS**

