

**SOD-323 Plastic-Encapsulate Diode****B5819WS** SCHOTTKY BARRIER DIODE

FEATURES

Power dissipation

$$P_D: \quad 200 \quad \text{mW (Tamb=25°C)}$$

Collector current

$$I_F: \quad 1 \quad \text{A}$$

Collector-base voltage

$$V_R: \quad 40 \quad \text{V}$$

Operating and storage junction temperature range

$$T_J, T_{stg}: -55^\circ\text{C to } +150^\circ\text{C}$$



MARKING: SL

ELECTRICAL CHARACTERISTICS (Tamb=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Reverse breakdown voltage	$V_{(BR)}$	$I_R = 1\text{mA}$	40		V
Reverse voltage leakage current	I_R	$V_R = 40\text{V}$ $V_R = 4\text{V}$ $V_R = 6\text{V}$		1 0.05 0.075	mA
Forward voltage	V_F	$I_F = 0.1\text{A}$ $I_F = 1\text{A}$ $I_F = 3\text{A}$		0.45 0.6 0.9	V
Diode capacitance	C_D	$V_R = 4\text{V}, f = 1\text{MHz}$		120	pF

Typical Characteristics

B5819WS

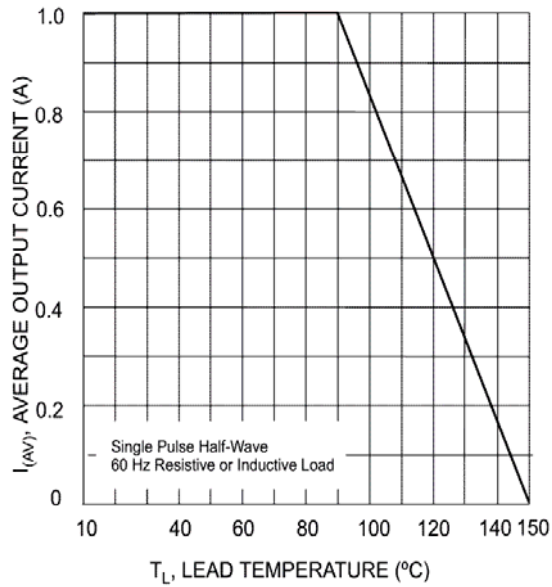


Fig. 1 Forward Current Derating Curve

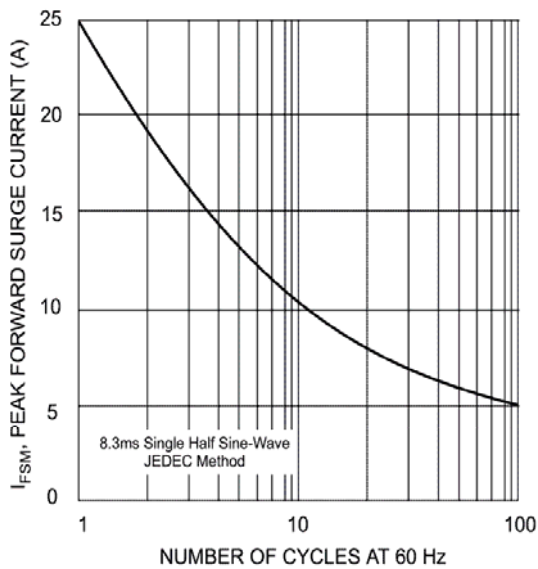
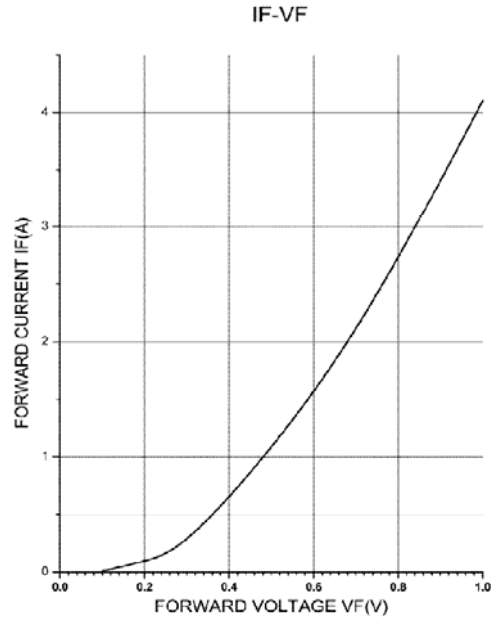


Fig. 3 Maximum Non-Repetitive Peak Fwd Surge Current

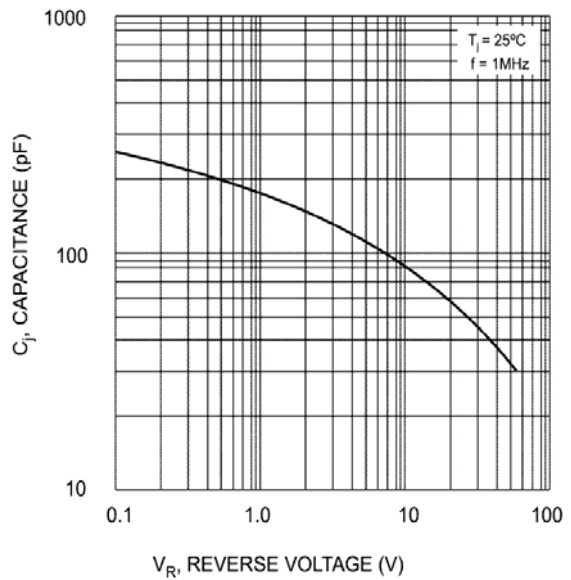


Fig. 4 Typical Junction Capacitance