



CHUANGYUAN TECHNOLOGES (HK) LIMITED

SOD-123 Plastic-Encapsulate Diode

B5819W SCHOTTKY BARRIER DIODE

FEATURES

Power dissipation

P_D : 450 mW ($T_{amb}=25^\circ\text{C}$)

Collector current

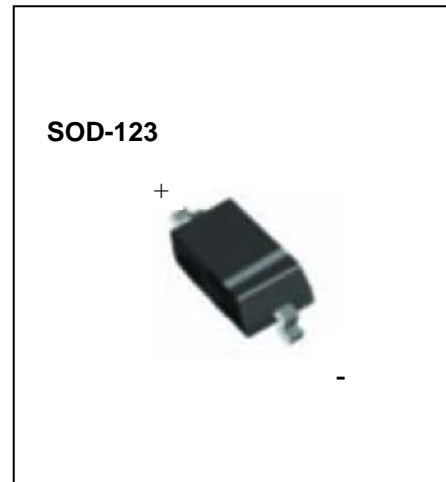
I_F : 1 A

Collector-base voltage

V_R : 40 V

Operating and storage junction temperature range

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



MARKING: SL

ELECTRICAL CHARACTERISTICS ($T_{amb}=25^\circ\text{C}$ 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

B5819W

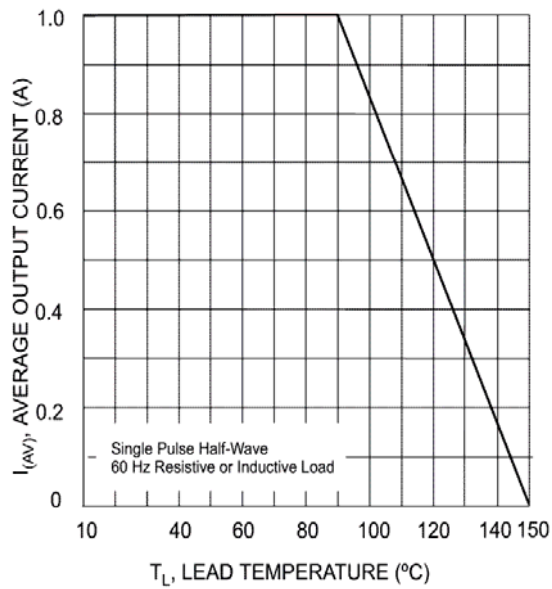


Fig. 1 Forward Current Derating Curve

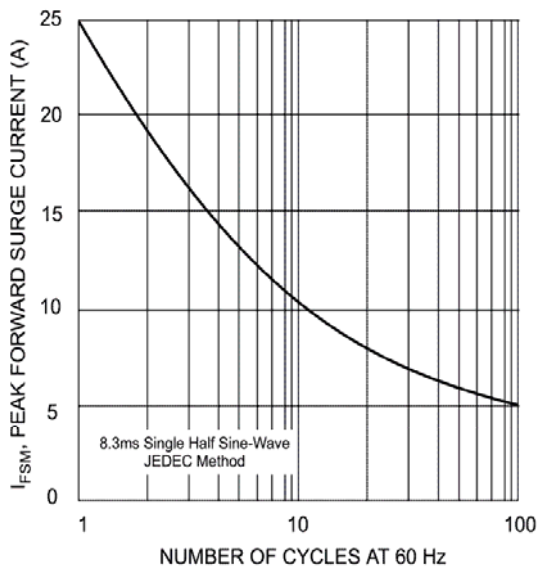
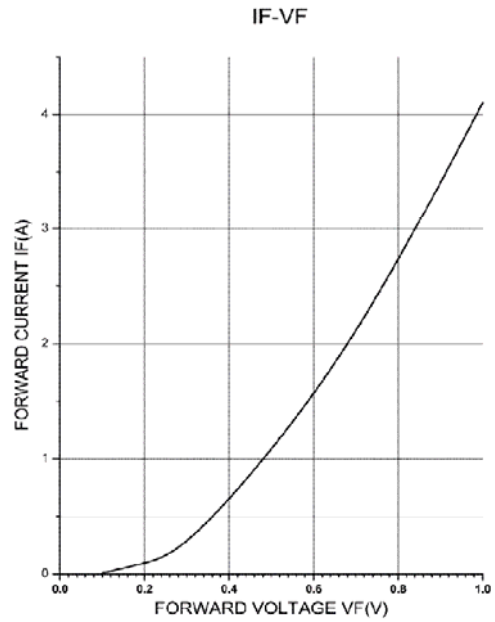


Fig. 3 Maximum Non-Repetitive Peak Fwd Surge Current

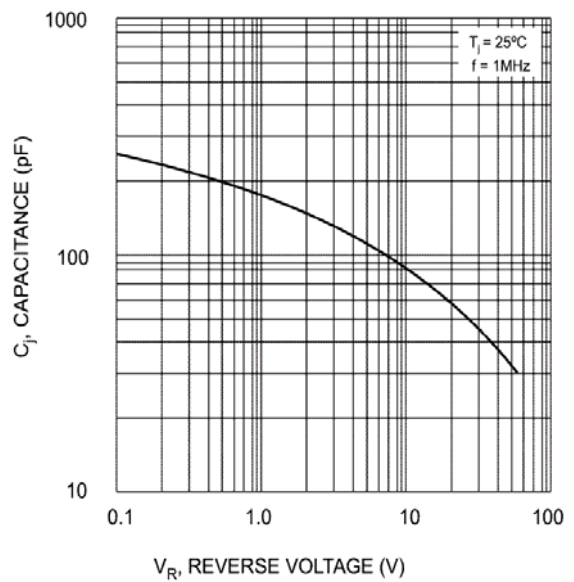


Fig. 4 Typical Junction Capacitance