

SCHOTTKY BARRIER DIODE

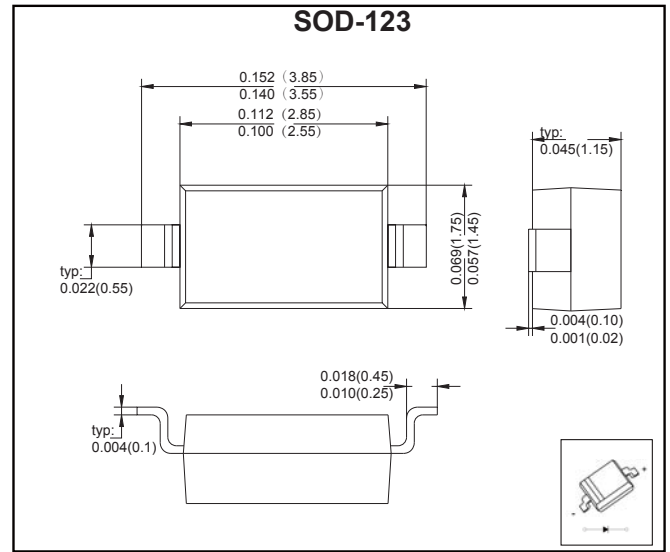
VOLTAGE RANGE: 20V-40V PEAK PULSE POWER:500mW

FEATURES

- High Current Capability
- Low Forward Voltage Drop

MECHANICAL DATA

- Case: SOD-123 Small Outline Plastic Package
- Polarity: Color band denotes cathode end
- Mounting Position: Any



MAXIMUM RATINGS AND CHARACTERISTICS

Ratings at 25 C ambient temperature unless otherwise specified

Parameter	Symbol	B5817W	B5818W	B5819W	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	20	30	40	V
Peak Repetitive Peak Reverse Voltage	V_{RRM}	20	30	40	V
Working Peak Reverse Voltage	V_{RWM}				
DC Blocking Voltage	V_R				
RMS Reverse Voltage	$V_{R(RMS)}$	14	21	28	V
Average Rectified Output Current	I_O	1			A
Non-repetitive Peak Forward Surge Current @t=8.3ms	I_{FSM}	9			A
Repetitive Peak Forward Current	I_{FRM}	1.5			A
Power Dissipation	P_D	500			mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	200			°C/W
Junction temperature	T_J	125			°C
Storage Temperature	T_{STG}	-55~+150			°C

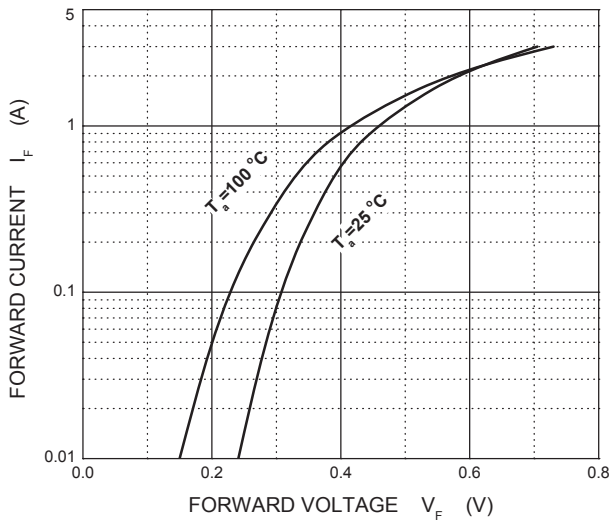
Electrical Specification ($T_A=25^{\circ}C$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	$I_R=1mA$			V
		B5817W	20		
		B5818W	30		
Reverse voltage leakage current	I_R	$V_R=20V$		1	mA
		$V_R=30V$			
		$V_R=40V$			
Forward voltage	V_F	B5817W	$I_F=1A$	0.45	V
			$I_F=3A$	0.75	
		B5818W	$I_F=1A$	0.55	V
			$I_F=3A$	0.875	
		B5819W	$I_F=1A$	0.6	V
			$I_F=3A$	0.9	
Diode capacitance	C_D	$V_R=4V, f=1MHz$		120	pF

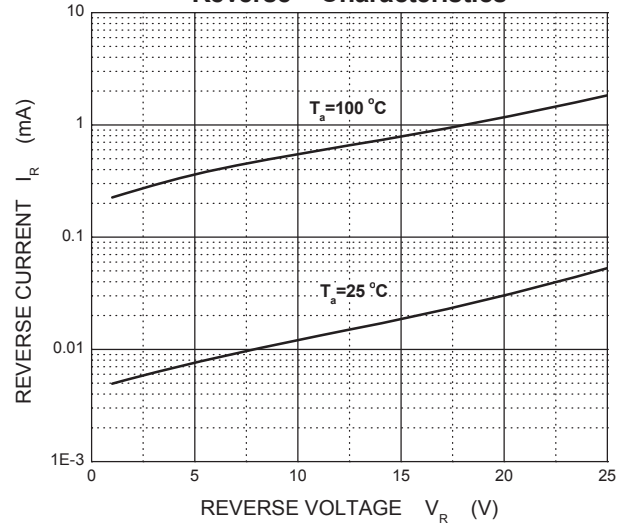
	B5817W	5818W	B5819W
MARKING:	SJ	BSK	SL

RATINGS AND CHARACTERISTIC CURVES

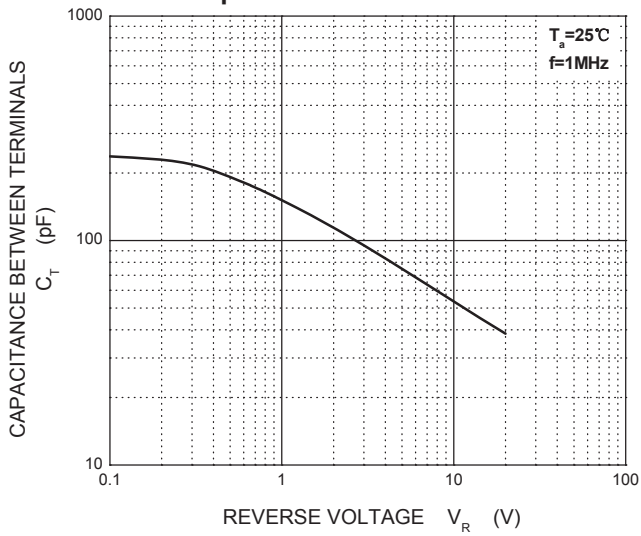
Forward Characteristics



Reverse Characteristics



Capacitance Characteristics



Power Derating Curve

