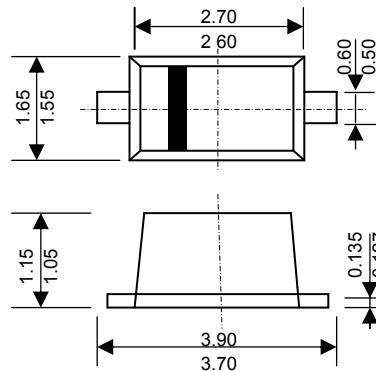


BAT46W

SCHOTTKY BARRIER DIODE

SOD-123



Dimensions in millimeters

FEATURES :

- * High breakdown voltage
- * Low forward voltage
- * Surface mount device
- * Pb / RoHS Free

MECHANICAL DATA :

- * Case : SOD-123
- * Weight : 0.01 gram (approximately)

Maximum Ratings and Thermal Characteristics ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	100	V
Continuous Forward Current	I_F	150	mA
Repetitive Peak Forward Current at $t_p < 1\text{s}$,	I_{FRM}	350	mA
Forward Surge Current at $t_p < 10\text{ ms}$,	I_{FSM}	750	mA
Power Dissipation	P_{tot}	200	mW
Thermal Resistance Junction to Ambient Air	R_{0JA}	420	°C/W
Operating Junction Temperature	T_J	-55 to + 125	°C
Storage temperature range	T_{STG}	-55 to + 150	°C

Electrical Characteristics ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse Breakdown Voltage	$V_{(BR)R}$	$I_R = 100\ \mu\text{A}$	100	-	-	V
Forward Voltage	V_F	$I_F = 0.1\text{ mA}$	-	-	0.25	
		$I_F = 10\text{ mA}$	-	-	0.45	
		$I_F = 250\text{ mA}$	-	-	1.00	
Reverse Current	I_R	$V_R = 1.5\text{ V}$			0.5	
		$V_R = 10\text{ V}$			0.8	
		$V_R = 50\text{ V}$			2.0	
		$V_R = 75\text{ V}$	-	-	5.0	
		$V_R = 1.5\text{ V}, T_J = 60\text{ }^\circ\text{C}$			5.0	
		$V_R = 10\text{ V}, T_J = 60\text{ }^\circ\text{C}$			7.5	
		$V_R = 50\text{ V}, T_J = 60\text{ }^\circ\text{C}$	-	-	15	
		$V_R = 75\text{ V}, T_J = 60\text{ }^\circ\text{C}$	-	-	20	
Diode Capacitance	C_T	$V_R = 0\text{ V}, f = 1\text{MHz}$	-	20	-	pF
		$V_R = 1\text{ V}, f = 1\text{MHz}$	-	12	-	