

BAT54WT

SMALL SIGNAL SCHOTTKY DIODE

PRV : 30 Volts

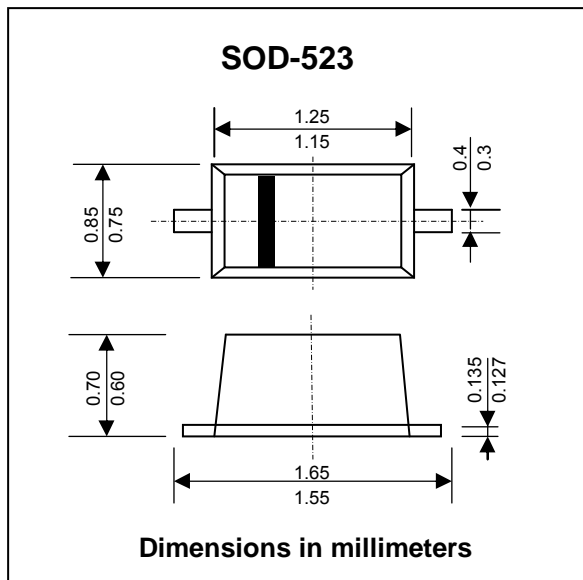
Io : 200 mA

FEATURES :

- * Low forward voltage
- * Pb / RoHS Free

MECHANICAL DATA :

- * Case : SOD-523 plastic Case
- * Weight : approx. 0.001 g
- * Marking Code : "3"



MAXIMUM RATINGS (Rating at 25 °C ambient temperature unless otherwise specified.)

Parameter	Symbol	Value	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	30	V
Maximum Forward Continuous Current	I_F	200	mA
Maximum Repetitive Peak Forward Current	I_{FRM}	300	mA
Maximum Peak Forward Surge Current at $t_p < 10$ ms	I_{FSM}	600	mA
Total Power Dissipation	P_{tot}	200	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	500	K/W
Maximum Junction Temperature	T_J	125	°C
Storage Temperature Range	T_{STG}	-65 to +150	°C

ELECTRICAL CHARACTERISTICS (Rating at 25 °C ambient temperature unless otherwise specified)

Parameter	Test Condition	Symbol	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage	$I_R = 10 \mu A$	$V_{(BR)}$	30	-	-	V
Leakage Current	$V_R = 25$ V	I_R	-	-	2	μA
Forward Voltage	$I_F = 0.1$ mA	V_F	-	-	0.24	V
	$I_F = 1$ mA	V_F	-	-	0.32	V
	$I_F = 10$ mA	V_F	-	-	0.4	V
	$I_F = 30$ mA	V_F	-	-	0.5	V
	$I_F = 100$ mA	V_F	-	-	0.8	V
Total Capacitance	$V_R = 1$ V, $f = 1$ MHz	C_T	-	-	10	pF
Reverse Recovery Time	$I_F = 10$ mA $I_R = 10$ mA, $V_R = 6$ V, $R_L = 100 \Omega$	T_{rr}	-	-	6	ns

RATINGS AND CHARACTERISTIC CURVES (BAT54WT)

FIG.1 - DERATING CURVE

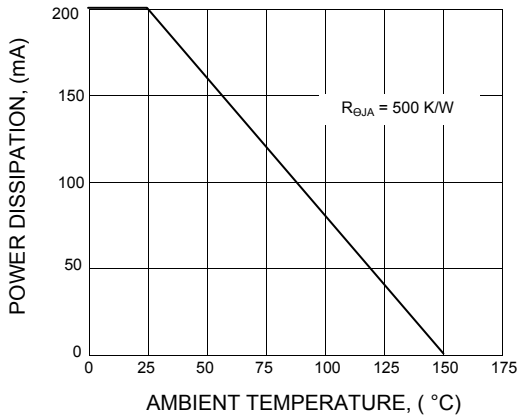


FIG.2 - TYPICAL CAPACITANCE VS. REVERSE VOLTAGE

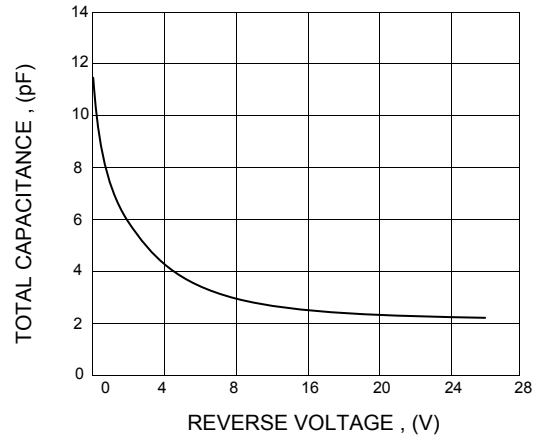


FIG.3 - TYPICAL FORWARD VOLTAGE FORWARD CURRENT AT VARIOUS TEMPERATURE

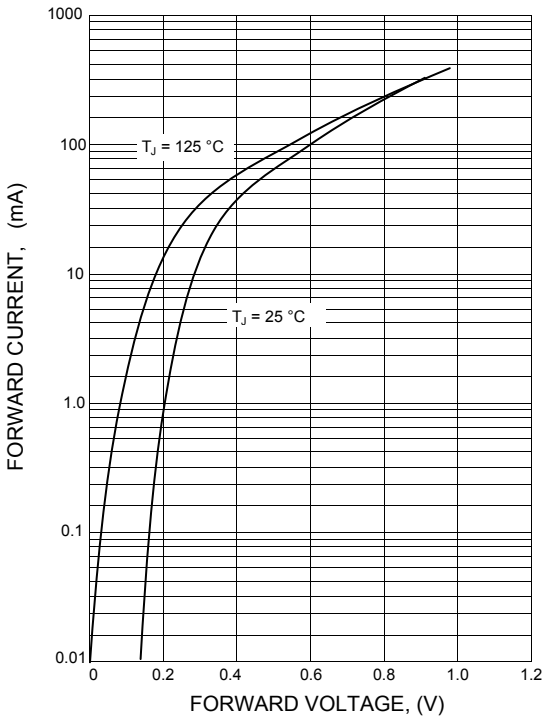


FIG.4 - TYPICAL VARIATION OF REVERSE CURRENT AT VARIOUS TEMPERATURES

