



FUKUCOM COMPANY LTD.

福 靈 有 限 公 司

FLAT P, 3/F., EVEREST INDUSTRIAL CENTRE, 396 KWUN TONG ROAD,
KWUN TONG, KOWLOON, HONG KONG.

TEL: 852-2790 0314 FAX: 852-2790 0206

BA892WT

SILICON RF SWITCHING DIODE

FEATURES

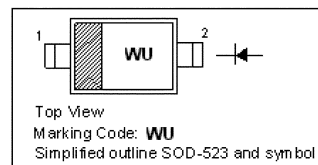
- Small capacitance

APPLICATIONS

- For band switching in TV/VTR
tuners and mobile applications

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

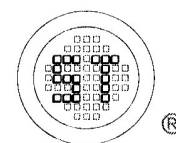


Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Diode Reverse Voltage	V_R	35	V
Forward Current	I_F	100	mA
Junction Temperature	T_J	150	$^\circ\text{C}$
Operating Temperature Range	T_{op}	-55 to +125	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55 to +150	$^\circ\text{C}$
Junction Soldering Point	R_{thJS}	120	K/W

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

Parameter	Symbol	Min.	Typ.	Max.	Unit
Reverse Current at $V_R = 20\text{ V}$	I_R	-	-	20	nA
Forward Voltage at $I_F = 100\text{ mA}$	V_F	-	-	1	V
Diode Capacitance at $V_R = 1\text{ V}$, $f = 1\text{ MHz}$ at $V_R = 3\text{ V}$, $f = 1\text{ MHz}$ at $V_R = 0\text{ V}$, $f = 100\text{ MHz}$	C_T	0.65 0.6 -	0.92 0.85 1	1.4 1.1 -	pF
Reverse Parallel Resistance at $V_R = 0\text{ V}$, $f = 100\text{ MHz}$	R_P	-	100	-	K Ω
Forward Resistance at $I_F = 3\text{ mA}$, $f = 100\text{ MHz}$ at $I_F = 10\text{ mA}$, $f = 100\text{ MHz}$	r_f	- -	0.45 0.36	0.7 0.5	Ω
Charge Carrier Life Time at $I_F = 10\text{ mA}$, $I_R = 6\text{ mA}$, measured at $I_R = 3\text{ mA}$, $R_L = 100\text{ }\Omega$	τ_{rr}	-	120	-	ns
I-region Width	W_I	-	3	-	μm
Series Inductance	L_s	-	0.6	-	nH



SEMTECH

Dated : 03/05/2006



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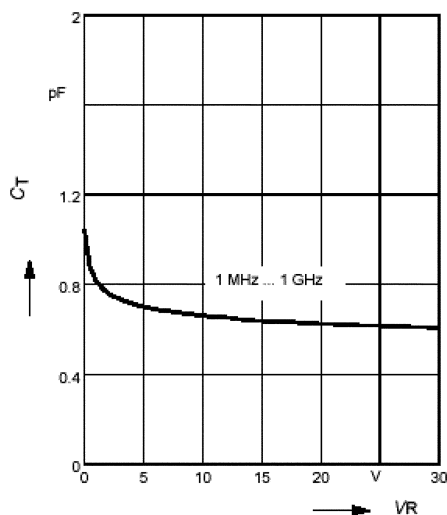
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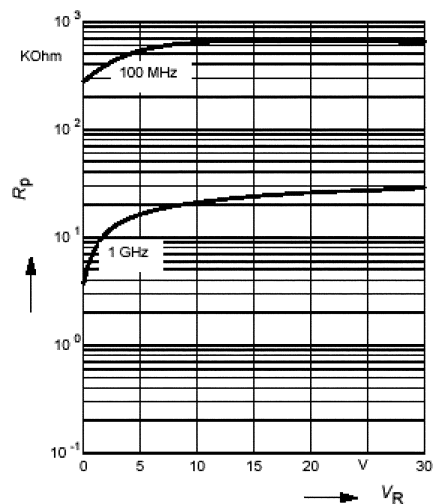
Diode capacitance $C_T = f(V_R)$

$f = \text{Parameter}$



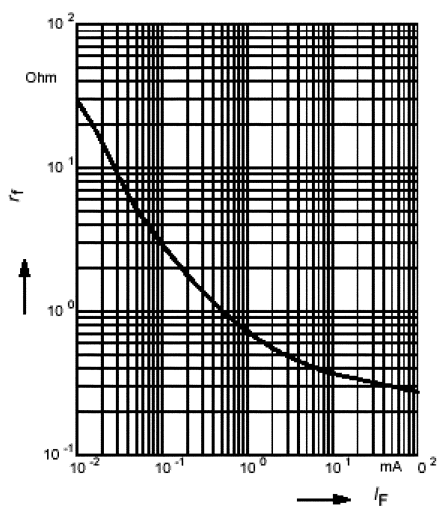
Reverse parallel resistance $R_P = f(V_R)$

$f = \text{Parameter}$



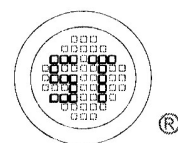
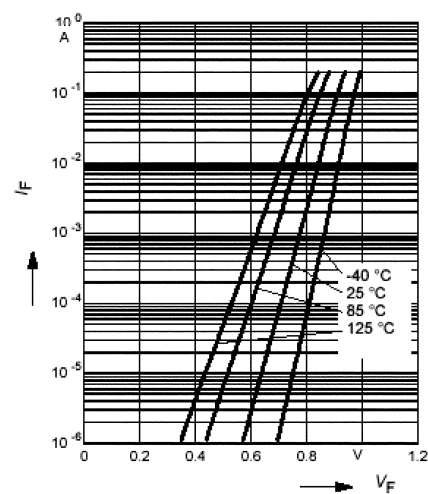
Forward resistance $r_f = f(I_F)$

$f = 100\text{MHz}$



Forward current $I_F = f(V_F)$

$T_A = \text{Parameter}$



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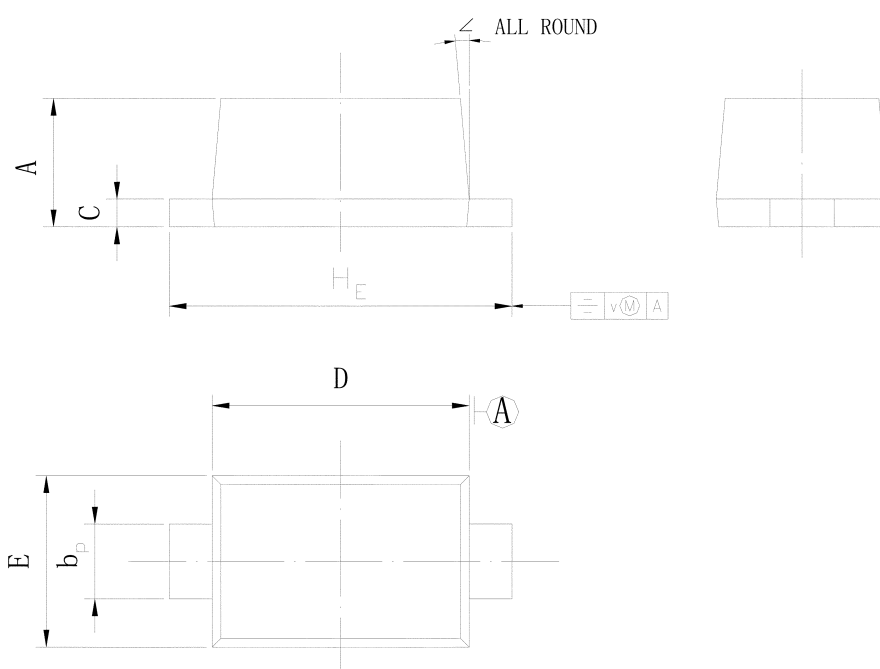
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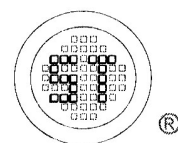
PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-523



UNIT	A	b _P	C	D	E	H _E	v	∠
mm	0.70 0.60	0.4 0.3	0.135 0.127	1.25 1.15	0.85 0.75	1.7 1.5	0.1	5°



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