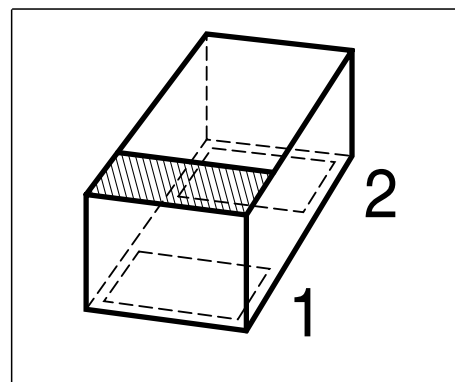
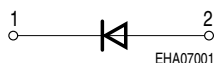


Silicon PIN Diode

Preliminary data

- Low loss RF switch
- RF attenuator
- Low series capacitance and resistance
- Ultra small leadless package



Type	Marking	Pin Configuration			Package
BAR 67-02L	TT	1 = C	2 = A	-	TSLP-2

Maximum Ratings

Parameter	Symbol	Value	Unit
Diode reverse voltage	V_R	150	V
Forward current	I_F	200	mA
Operating temperature range	T_{op}	-55 ... 125	°C
Storage temperature	T_{stg}	-55 ... 150	

Thermal Resistance

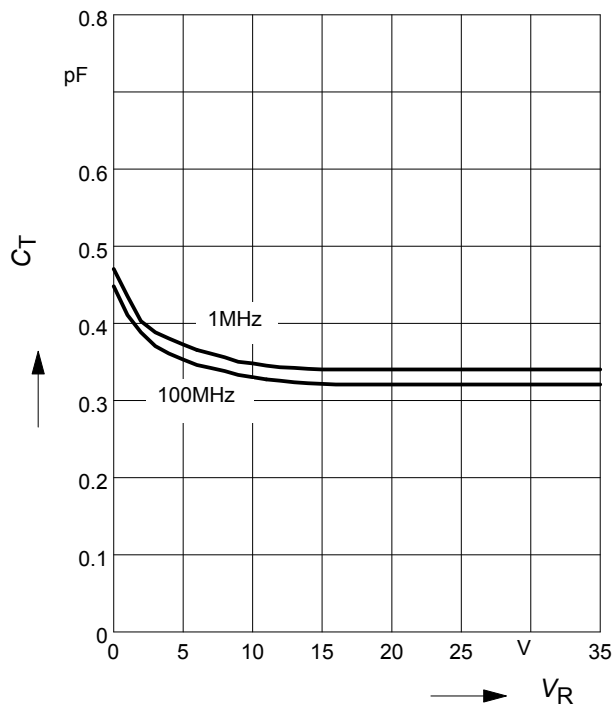
Parameter	Symbol	Value	Unit
Junction - soldering point	R_{thJS}	tbd	K/W

Electrical Characteristics at $T_A = 25^\circ\text{C}$, unless otherwise specified

Parameter	Symbol	Values			Unit
		min.	typ.	max.	
DC Characteristics					
Breakdown voltage $I_{(BR)} = 5 \mu A$	$V_{(BR)}$	150	-	-	V
Reverse current $V_R = 100 V$	I_R	-	-	20	nA
Forward voltage $I_F = 50 mA$	V_F	-	0.95	1.2	V
AC Characteristics					
Diode capacitance $V_R = 5 V, f = 1 MHz$ $V_R = 0 V, f = 100 MHz$	C_T	- -	0.35 0.35	0.55 0.9	pF
Zero bias conductance $V_R = 0 V, f = 100 MHz$	g_P	-	220	-	μS
Forward resistance $I_F = 5 V, f = 100 MHz$	r_f	-	1.5	1.8	Ω
Charge carrier life time $I_F = 10 mA, I_R = 6 mA, I_R = 3 mA$	τ_{rr}	-	0.7	-	μs
Case capacitance $f = 1 MHz$	C_C	-	0.05	-	pF
Series inductance	L_S	-	0.6	-	nH

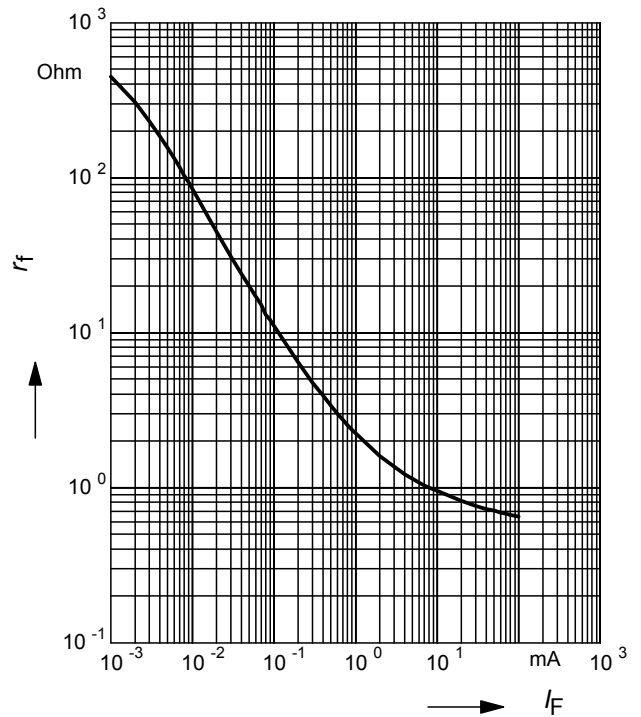
Diode capacitance $C_T = f(V_R)$

f = Parameter



Forward resistance $r_f = f(I_F)$

f = 100MHz



Forward current $I_F = f(V_F)$

$T_A = 25^\circ\text{C}$

