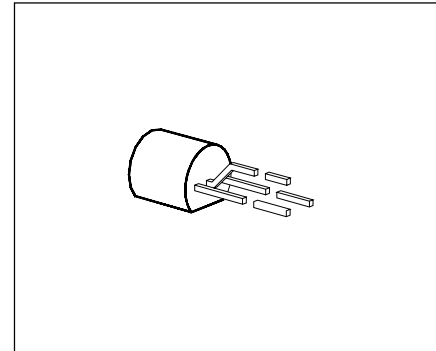


Silicon PIN Diode

BA 489

Preliminary Data Sheet

- Current-controlled RF resistor for FM input stage gain control



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Type	Ordering Code (tape and reel)	Pin Configuration			Marking	Package
		1	2	3		
BA 489	Q62702-A...	C	n.c.	A	BA 489	TO-92

Maximum Ratings

Parameter	Symbol	Values	Unit
Reverse voltage	V_R	50	V
Forward current	I_F	50	mA
Junction temperature	T_j	150	°C
Storage temperature range	T_{stg}	- 55 ... + 150	°C

Thermal Resistance

Junction-ambient	$R_{th JA}$	≤ 300	K/W
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Electrical Characteristics

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

Parameter	Symbol	Value			Unit
		min.	typ.	max.	

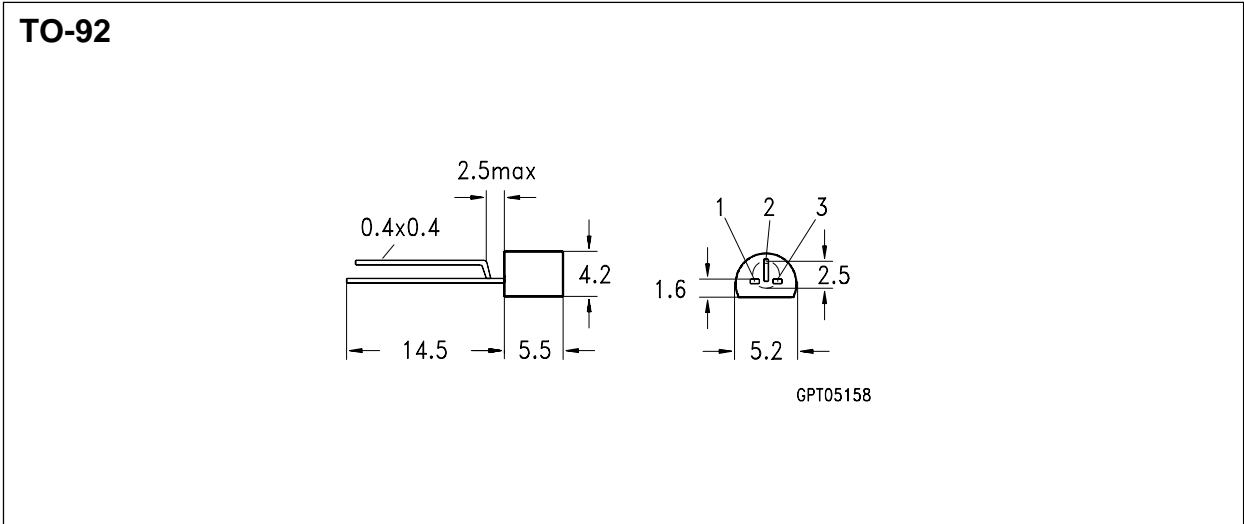
DC Characteristics

Forward voltage $I_F = 50\text{ mA}$	V_F	–	–	1	V
Reverse current $V_R = 30\text{ V}$	I_R	–	–	50	nA

AC Characteristics

Diode capacitance $V_R = 15\text{ V}, f = 1\text{ MHz}$ $V_R = 0\text{ V}, f = 100\text{ MHz}$	C_O	– –	0.47 0.5	0.8 –	pF
Forward resistance $I_F = 10\text{ mA}, f = 100\text{ MHz}$	r_f	6	7.5	11	Ω
Zero bias conductance $V_R = 0\text{ V}, f = 100\text{ MHz}$	g_p	–	60	–	μS
Series inductance	L_S	–	6	–	nH

Package Outline



Forward resistance $r_f = f(I_F)$

$f = 100 \text{ MHz}$

