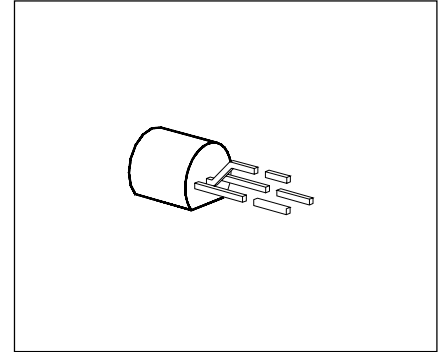


## Silicon PIN Diode

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	$\Omega$
Zero bias conductance $V_R = 0\text{ V}, f = 100\text{ MHz}$	$g_p$	–	60	–	$\mu\text{S}$
Series inductance	$L_S$	–	6	–	nH

**Package Outline**

**TO-92**

GPT05158

Forward resistance  $r_f = f(I_F)$

$f = 100 \text{ MHz}$

