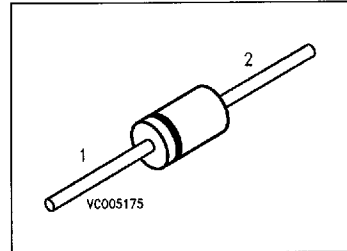


## Silicon PIN Diode

**BA 389**

- Current-controlled RF resistor for switching and attenuating applications
- Frequency range 1 MHz ... 1 GHz
- Not for new design



Type	Marking	Ordering Code	Pin Configuration	Package <sup>1)</sup>
BA 389	yellow	Q62702-A732		DO-35 DHD

### Maximum Ratings

Parameter	Symbol	Values	Unit
Reverse voltage	$V_R$	30	V
Forward current	$I_F$	50	mA
Junction temperature	$T_J$	150	°C
Storage temperature range	$T_{stg}$	- 65 ... + 150	

### Thermal Resistance

Junction - ambient	$R_{thJA}$	≤ 400	K/W
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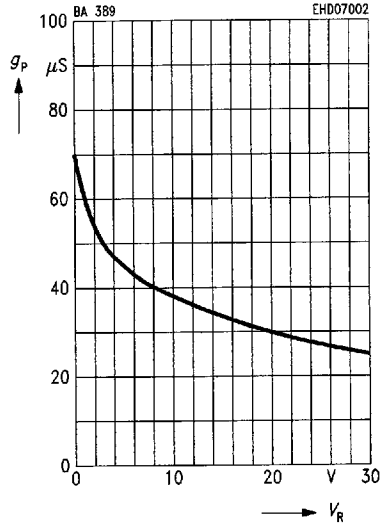
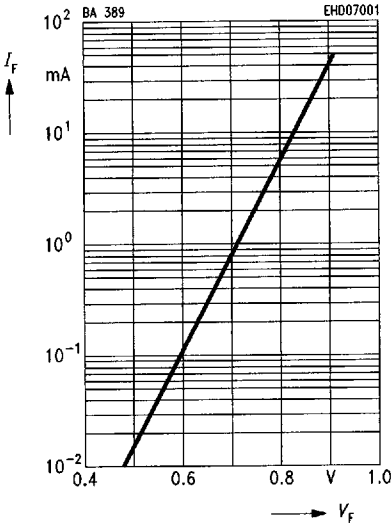
<sup>1)</sup> For detailed information see chapter Package Outlines.

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

Parameter	Symbol	Values			Unit
		min.	typ.	max.	
Forward voltage $I_F = 50\text{ mA}$	$V_F$	–	–	1	V
Reverse current $V_R = 30\text{ V}$	$I_R$	–	–	50	nA
Diode capacitance $V_R = 10\text{ V}, f = 1\text{ MHz}$ $V_R = 0\text{ V}, f = 100\text{ MHz}$	$C_T$	– –	0.55 0.35	– 0.5	pF
Forward resistance $f = 100\text{ MHz}$ $I_F = 1.5\text{ mA}$ $I_F = 10\text{ mA}$	$r_f$	– –	25 5	40 7.5	$\Omega$
Zero bias conductance $V_R = 0\text{ V}, f = 100\text{ MHz}$	$g_p$	–	70	–	$\mu\text{S}$
Series inductance	$L_S$	–	2.5	–	nH

**Forward characteristics  $I_F = f(V_F)$**

**Parallel conductance  $g_p = f(V_R)$**



**Forward resistance  $r_f = f(I_F)$   
 $f = 100$  MHz**

**Diode capacitance  $C_T = f(V_R)$**

