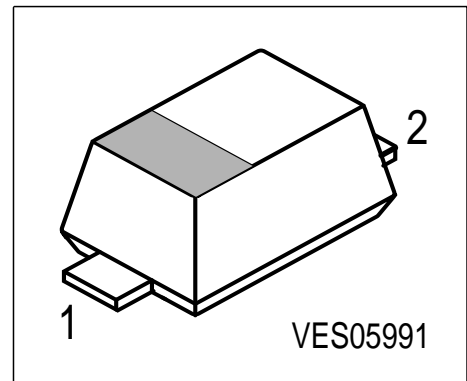


### Silicon Rf Switching Diode

#### Preliminary data

- For VHF band switching in TV / VTR tuners
- Low forward resistance, small capacitance, small inductance



Type	Marking	Ordering Code	Pin Configuration		Package
BA 892	A	Q62702-A1214	1 = C	2 = A	SCD-80

#### Maximum Ratings

Parameter	Symbol	Value	Unit
Diode reverse voltage	$V_R$	35	V
Forward current	$I_F$	100	mA
Operating temperature range	$T_{op}$	-55 ...+125	°C
Storage temperature	$T_{stg}$	-55 ...+150	

#### Thermal Resistance

Junction - ambient <sup>1)</sup>	$R_{thJA}$	≤ 450	K/W
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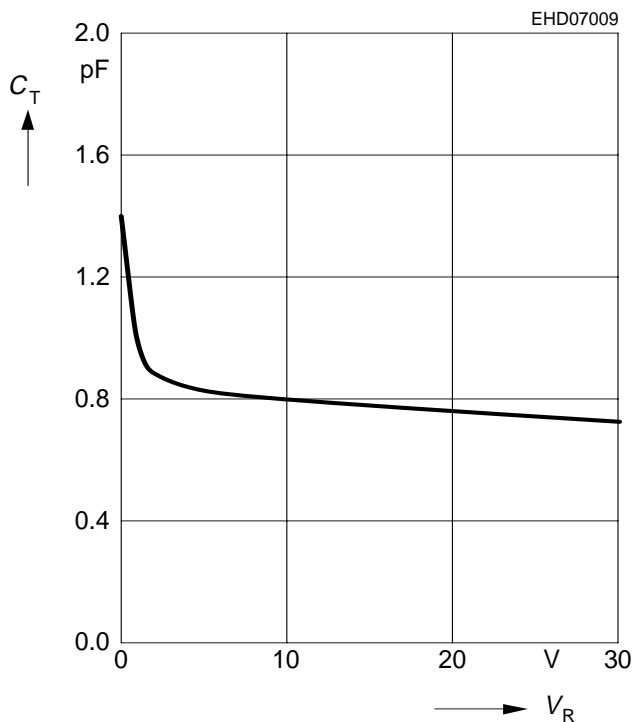
1) Package mounted on alumina 15mm x 16.7mm x 0.7mm

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

Parameter	Symbol	Values			Unit
		min.	typ.	max.	
<b>DC characteristics</b>					
Reverse current $V_R = 20\text{ V}$	$I_R$	-	-	20	$\mu\text{A}$
Forward voltage $I_F = 100\text{ mA}$	$V_F$	-	-	1	V
<b>AC characteristics</b>					
Diode capacitance $V_R = 1\text{ V}, f = 1\text{ MHz}$ $V_R = 3\text{ V}, f = 1\text{ MHz}$	$C_T$	0.65 0.6	0.92 0.85	1.3 1.1	pF
Forward resistance $I_F = 3\text{ mA}, f = 100\text{ MHz}$ $I_F = 10\text{ mA}, f = 100\text{ MHz}$	$r_f$	- -	0.45 0.36	0.7 0.5	$\Omega$
Reverse resistance $V_R = 1\text{ V}, f = 100\text{ MHz}$	$1/g_p$	-	100	-	$\text{k}\Omega$
Series inductance	$L_s$	-	0.6	-	nH

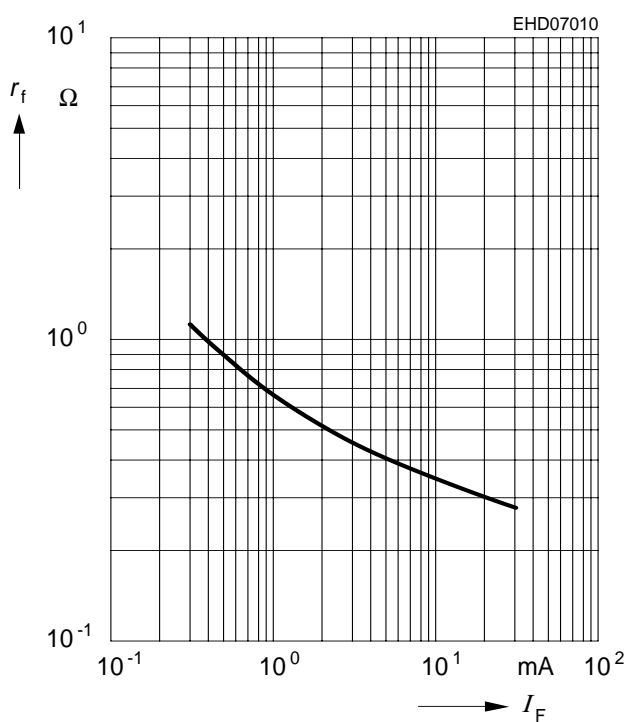
### Diode capacitance $C_T = f(V_R)$

$f = 1\text{MHz}$



### Forward resistance $r_f = f(I_F)$

$f = 100\text{MHz}$



### Forward current $I_F = f(V_F)$

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

