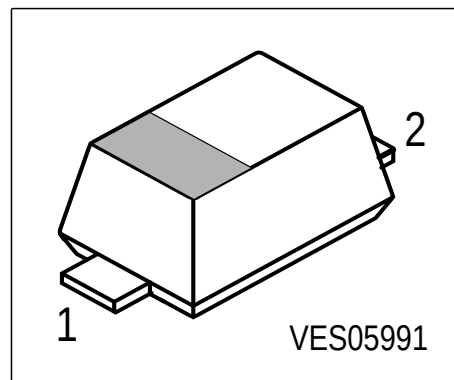


Silicon Rf Switching Diode

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 ¹⁾	R_{thJA}	≤ 450	K/W
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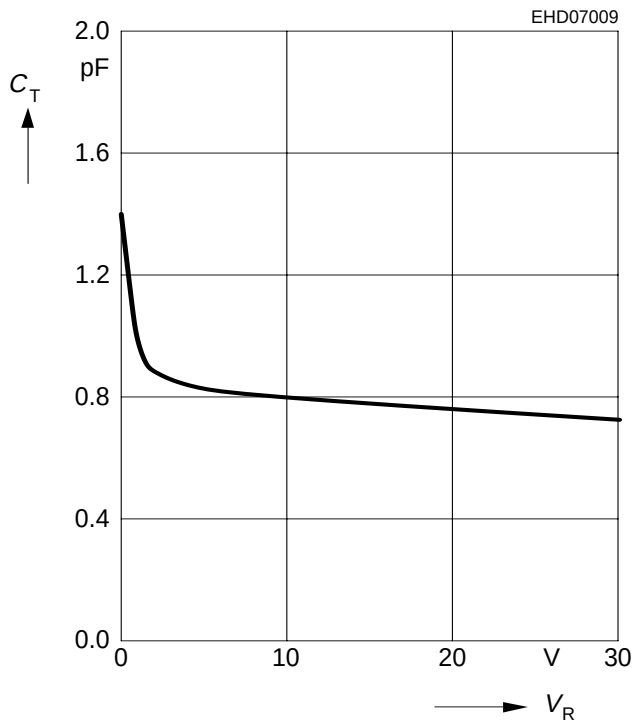
1) Package mounted on alumina 15mm x 16.7mm x 0.7mm

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

Parameter	Symbol	Values			Unit
		min.	typ.	max.	
DC characteristics					
Reverse current $V_R = 20\text{ V}$	I_R	-	-	20	μA
Forward voltage $I_F = 100\text{ mA}$	V_F	-	-	1	V
AC characteristics					
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	Ω
Reverse resistance $V_R = 1\text{ V}$, $f = 100\text{ MHz}$	$1/g_p$	-	100	-	k Ω
Series inductance	L_s	-	0.6	-	nH

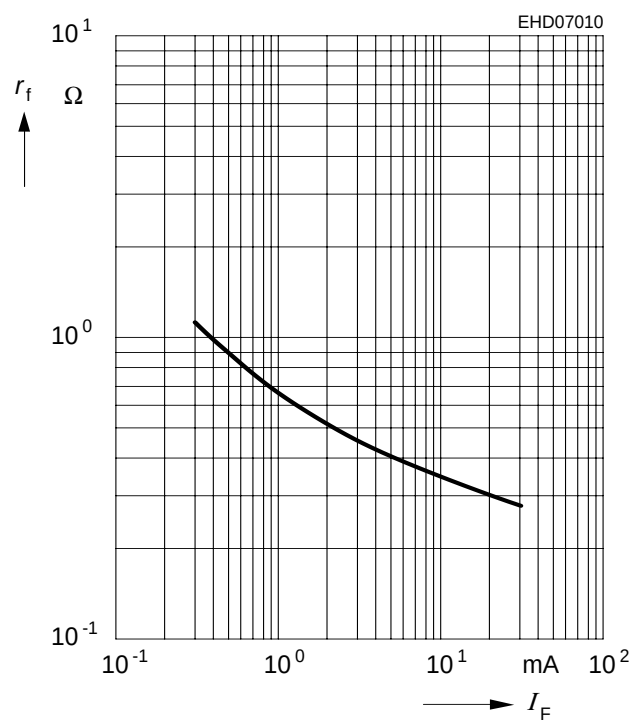
Diode capacitance $C_T = f(V_R)$

$f = 1\text{MHz}$



Forward resistance $r_f = f(I_F)$

$f = 100\text{MHz}$



Forward current $I_F = f(V_F)$

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

