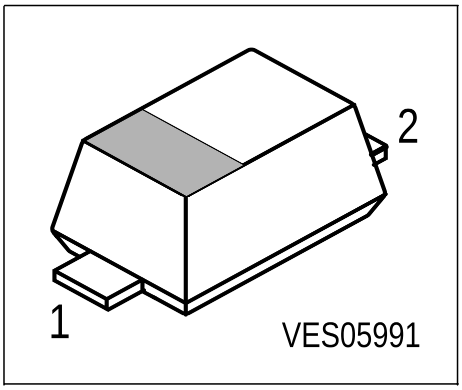
Silicon Rf Switching Diode

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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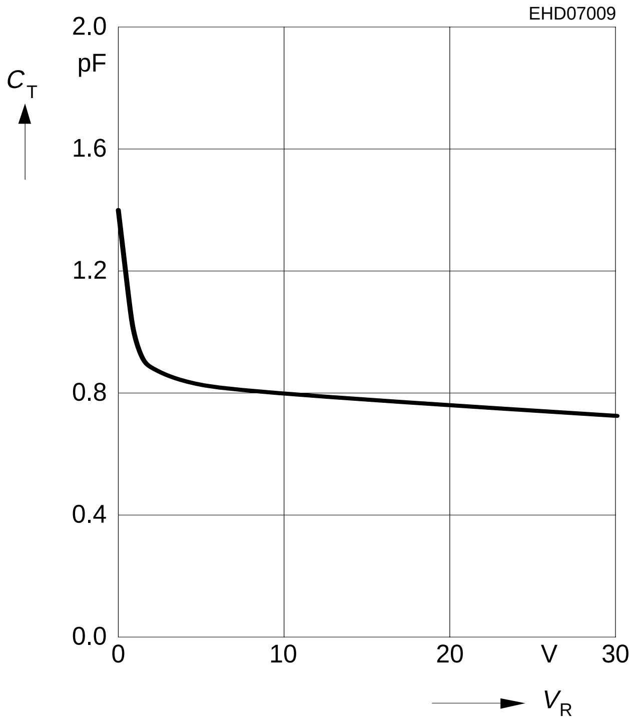
[1] Package mounted on alumina 15mm x 16.7mm x 0.7mm

Electrical Characteristics at T_A = 25°C, unless otherwise specified.					
Parameter	**Symbol**	**Values**			**Unit**
		min.	**typ.**	**max.**	
DC characteristics					
Reverse current V_R = 20 V	I_R	-	-	20	µA
Forward voltage I_F = 100 mA	V_F	-	-	1	V
AC characteristics					
Diode capacitance	C_T				pF
V_R = 1 V, f = 1 MHz		0.65	0.92	1.3	
V_R = 3 V, f = 1 MHz		0.6	0.85	1.1	
Forward resistance	r_f				Ω
I_F = 3 mA, f = 100 MHz		-	0.45	0.7	
I_F = 10 mA, f = 100 MHz		-	0.36	0.5	
Reverse resistance V_R = 1 V, f = 100 MHz	$1/g_p$	-	100	-	kΩ
Series inductance	L_s	-	0.6	-	nH

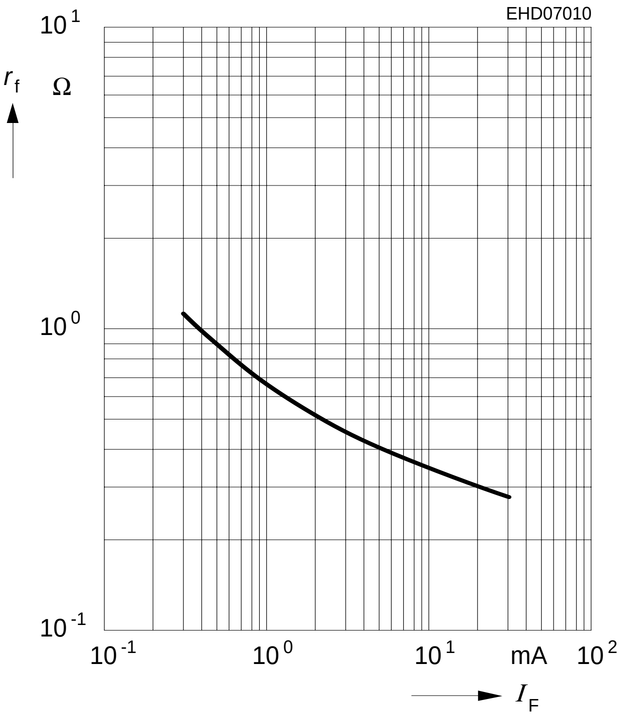
Diode capacitance $C_T = f(V_R)$

f = 1MHz



Forward resistance $r_f = f(I_F)$

f = 100MHz



Forward current $I_F = f(V_F)$

T_A = 25°C