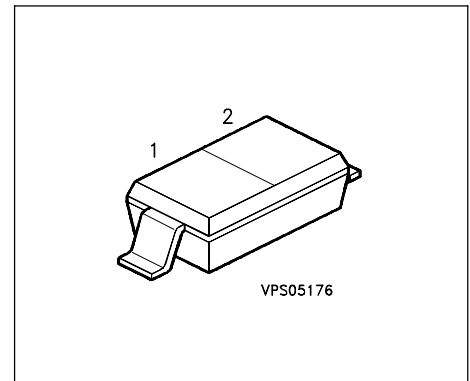


Silicon Schottky Diode

- Low Barrier diode for detectors up to GHz frequencies



ESD: ElectroStatic Discharge sensitive device, observe handling precautions!

Type	Marking	Ordering Code	Pin Configuration			Package
BAT 62-03W	L	Q62702-A1028	1 = A	2 = C		SOD-323

Maximum Ratings

Parameter	Symbol	Values	Unit
Diode reverse voltage	V_R	40	V
Forward current	I_F	40	mA
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	- 55 ... + 150	
Total power dissipation $T_S \leq 85^\circ\text{C}$	P_{tot}	100	mW

Thermal Resistance

Junction ambient ¹⁾	R_{thJA}	≤ 650	K/W
Junction - soldering point	R_{thJS}	≤ 810	

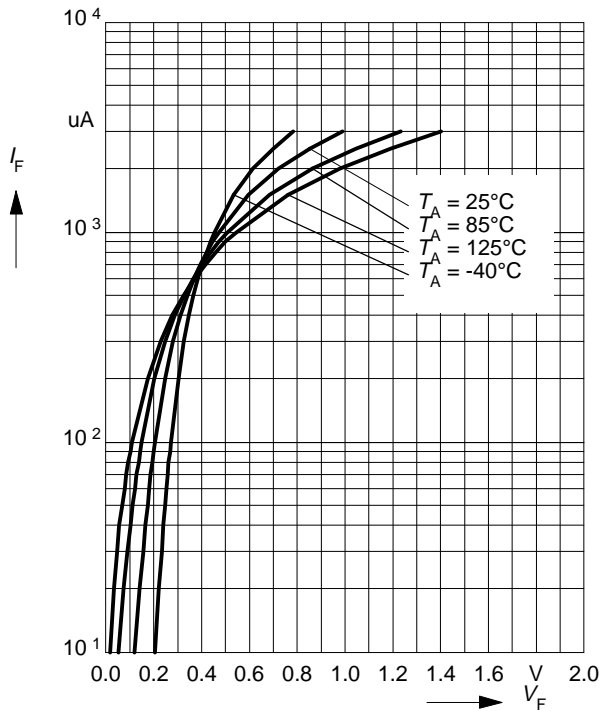
1) Package mounted on epoxy pcb 15mm x 16.7mm x 0.7mm

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

Parameter	Symbol	Values			Unit
		min.	typ.	max.	
DC characteristics					
Reverse current $V_R = 40 \text{ V}, T_A = 25^\circ\text{C}$	I_R	-	-	10	μA
Forward voltage $I_F = 2 \text{ mA}$	V_F	-	0.58	1	V
AC Characteristics					
Diode capacitance $V_R = 0, f = 1 \text{ MHz}$	C_T	-	0.35	0.6	pF
Case capacitance $f = 1 \text{ MHz}$	C_C	-	0.1	-	
Differential resistance $V_R = 0, f = 10 \text{ kHz}$	R_0	-	225	-	k Ω
Series inductance chip to ground	L_s	-	2	-	nH

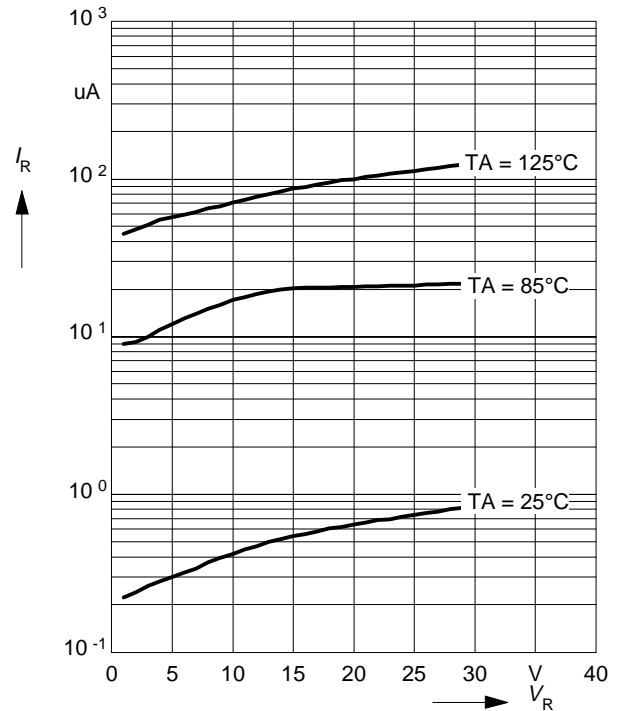
Forward current $I_F = f(V_F)$

$T_A = \text{parameter}$



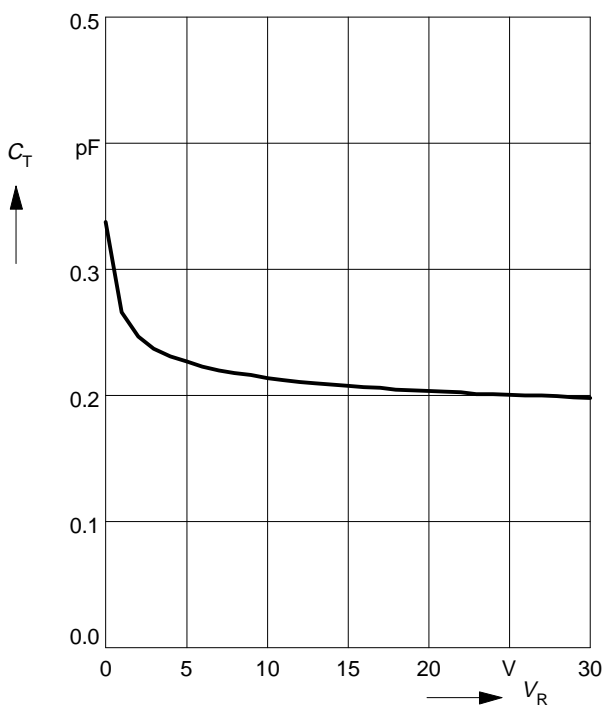
Leakage current $I_R = f(V_R)$

$T_A = \text{Parameter}$



Diode capacitance $C_T = f(V_R)$

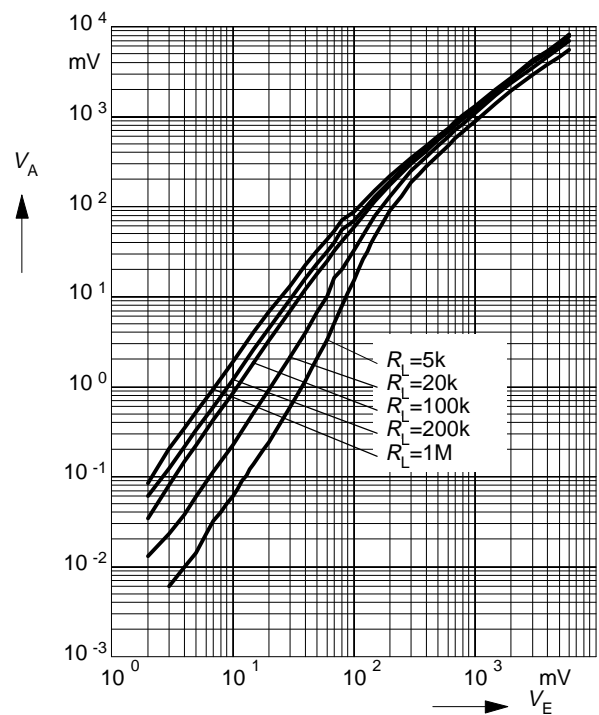
$f = 1\text{MHz}$



Rectifier voltage $V_0 = f(V_i)$

$f = 900\text{MHz}$

$R_L = \text{parameter in } \Omega$



Package

