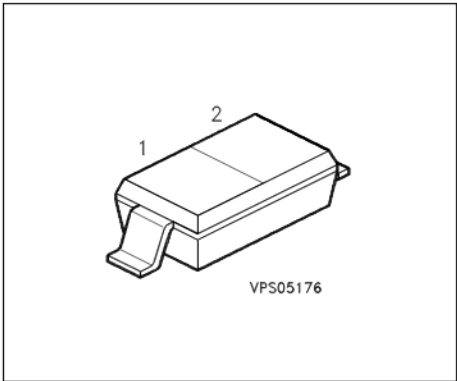


Silicon Schottky Diode

- 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 <sup>1)</sup>	$R_{thJA}$	$\leq 650$	K/W
Junction - soldering point	$R_{thJS}$	$\leq 810$	

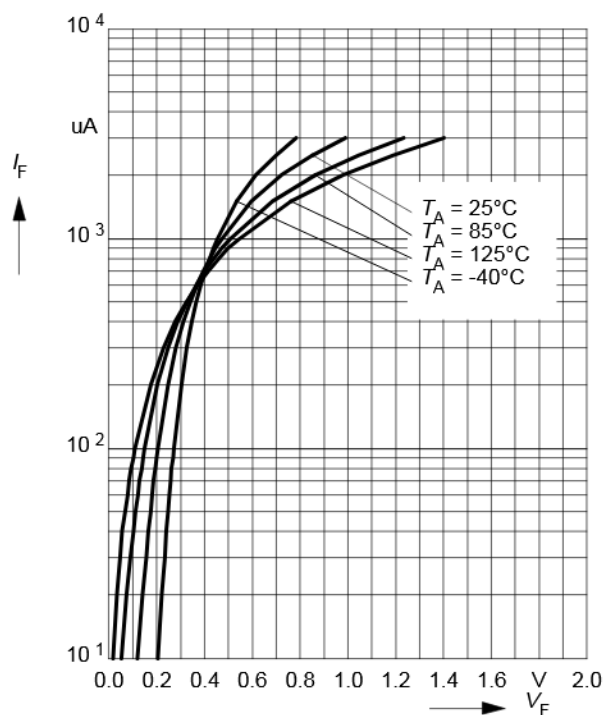
1) Package mounted on epoxy pcb 15mm x 16.7mm x 0.7mm

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

Parameter	Symbol	Values			Unit
		min.	typ.	max.	
DC characteristics					
Reverse current $V_R = 40\text{ V}$ , $T_A = 25\text{ }^{\circ}\text{C}$	$I_R$	-	-	10	$\mu\text{A}$
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 $\Omega$
Series inductance chip to ground	$L_s$	-	2	-	nH

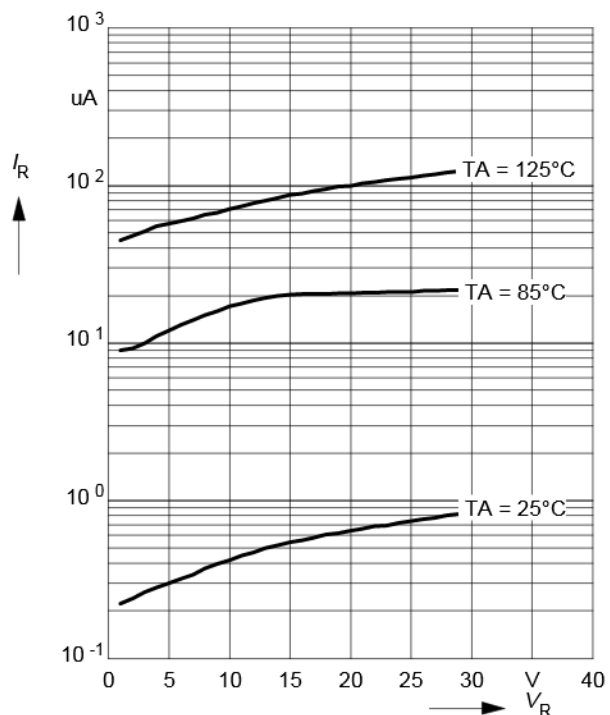
**Forward current  $I_F = f(V_F)$**

$T_A$  = parameter



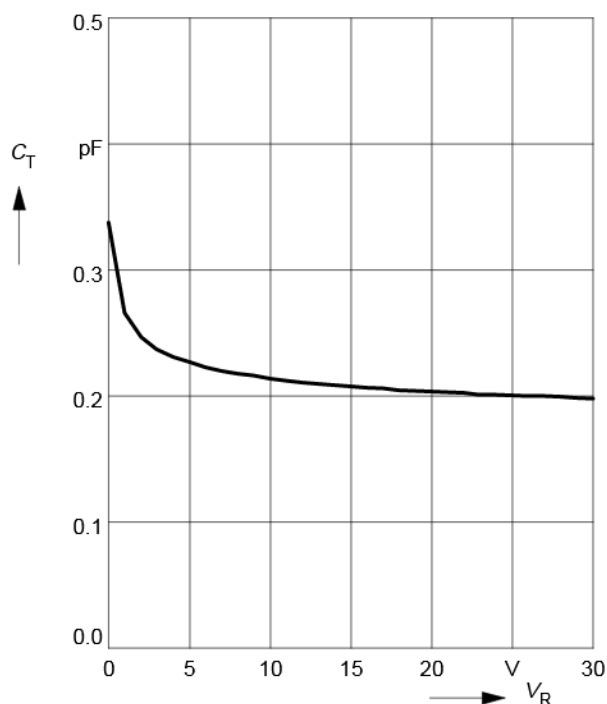
**Leakage current  $I_R = f(V_R)$**

$T_A$  = Parameter



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

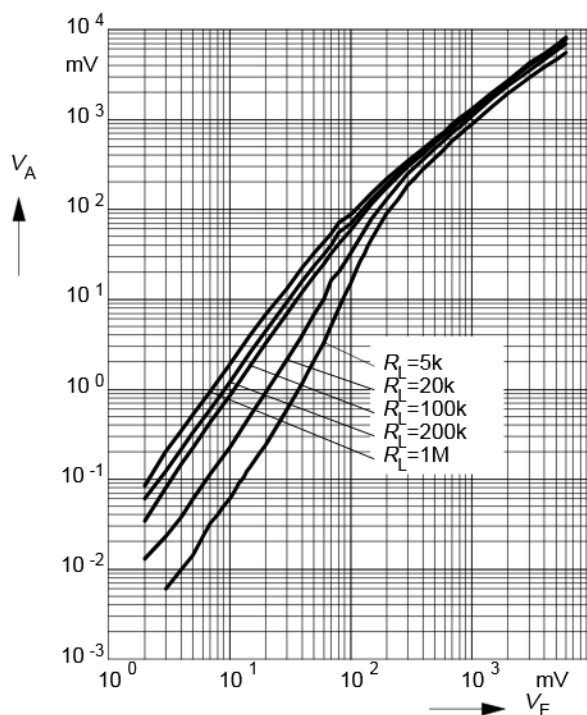
$f = 1\text{MHz}$



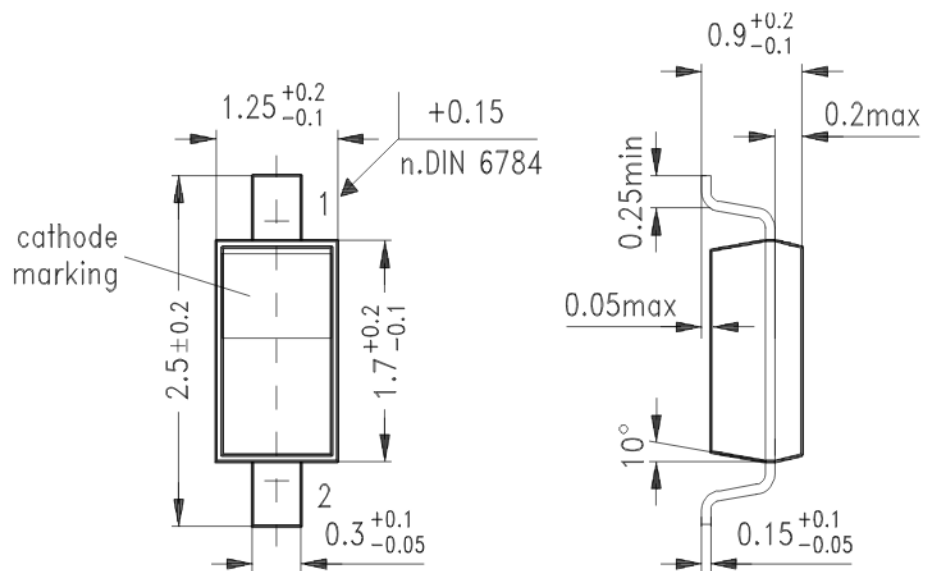
**Rectifier voltage  $V_0 = f(V_i)$**

$f = 900\text{MHz}$

$R_L$  = parameter in  $\Omega$



### Package



GPS05556

