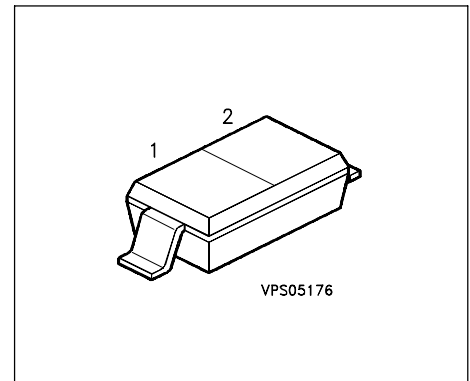


Silicon Schottky Diode

- DBS mixer application to 12GHz
- Medium barrier type
- Low capacitance



ESD: ElectroStatic Discharge sensitive device, observe handling precautions!

Type	Marking	Ordering Code	Pin Configuration			Package
BAT 14-03W	O/white	Q62702-A1103	1 = A	2 = C		SOD-323

Maximum Ratings

Parameter	Symbol	Values	Unit
Diode reverse voltage	V_R	4	V
Forward current	I_F	90	mA
Operating temperature range	T_{op}	- 55 ... + 125	°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}	≤ 450	K/W
Junction - soldering point	R_{thJS}	≤ 690	

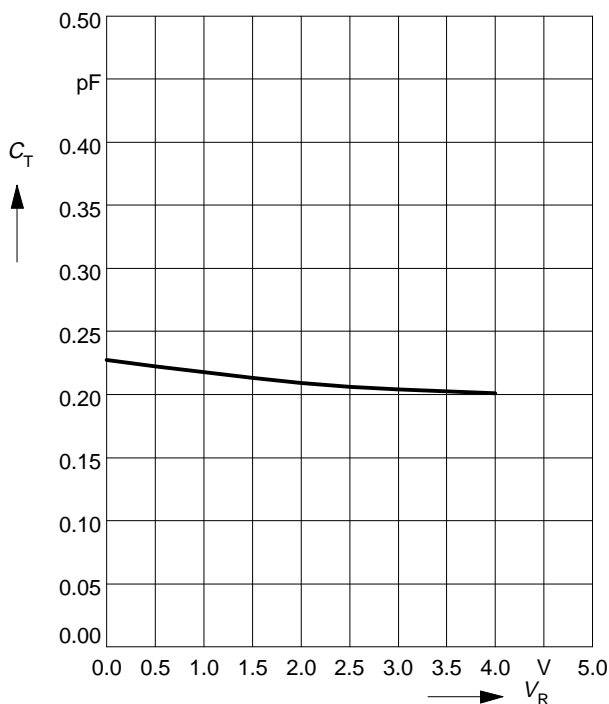
1) Package mounted on epoxy pcb 40mm x 40mm x 1.5mm / 0.5cm² Cu

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

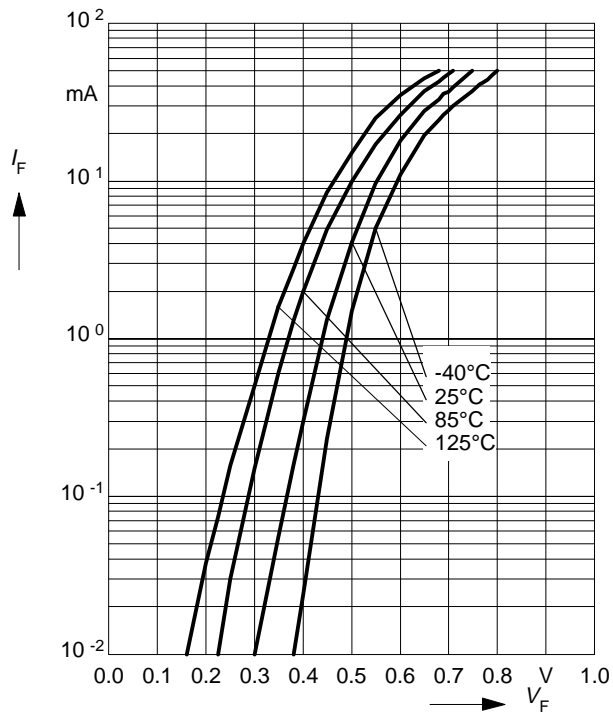
Parameter	Symbol	Values			Unit
		min.	typ.	max.	
DC characteristics					
Breakdown voltage $I_{(BR)} = 5 \mu\text{A}$	$V_{(BR)}$	4	-	-	V
Forward voltage $I_F = 1 \text{ mA}$	V_F	0.36	0.43	0.52	V
$I_F = 10 \text{ mA}$		0.48	0.55	0.66	
Diode capacitance $V_R = 0, f = 1 \text{ MHz}$	C_T	-	0.22	0.35	pF
Differential forward resistance $I_F 10\text{mA}/ 50 \text{ mA}$	R_F	-	5.5	-	Ω

Diode capacitance $C_T = f(V_R)$

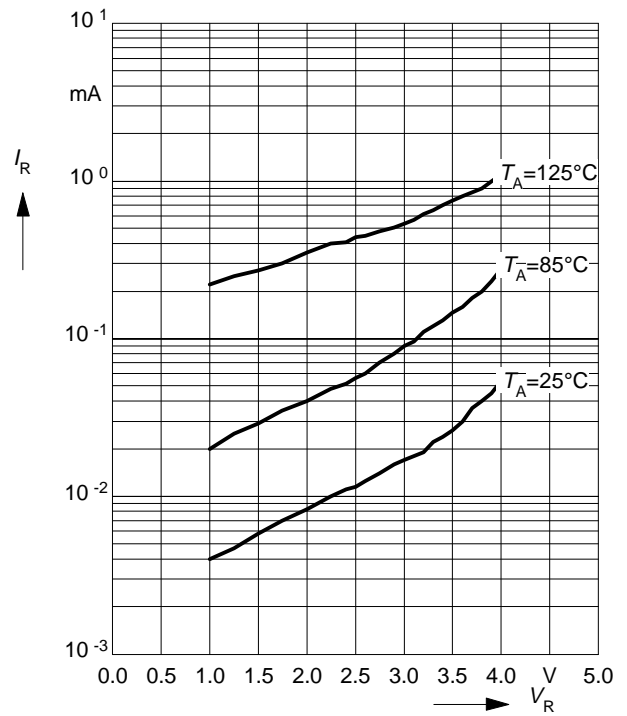
$f = 1\text{MHz}$



Forward current $I_F = f(V_F)$



Reverse current $I_R = f(V_R)$



Package

