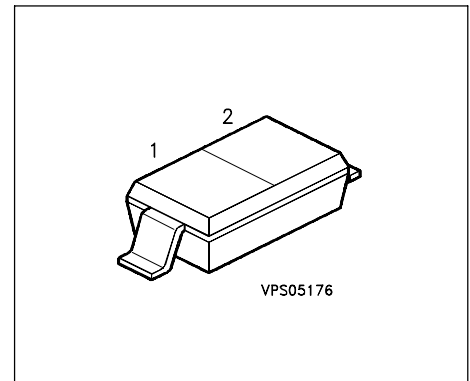


### Silicon Schottky Diode

- 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 <sup>1)</sup>	$R_{thJA}$	$\leq 450$	K/W
Junction - soldering point	$R_{thJS}$	$\leq 690$	

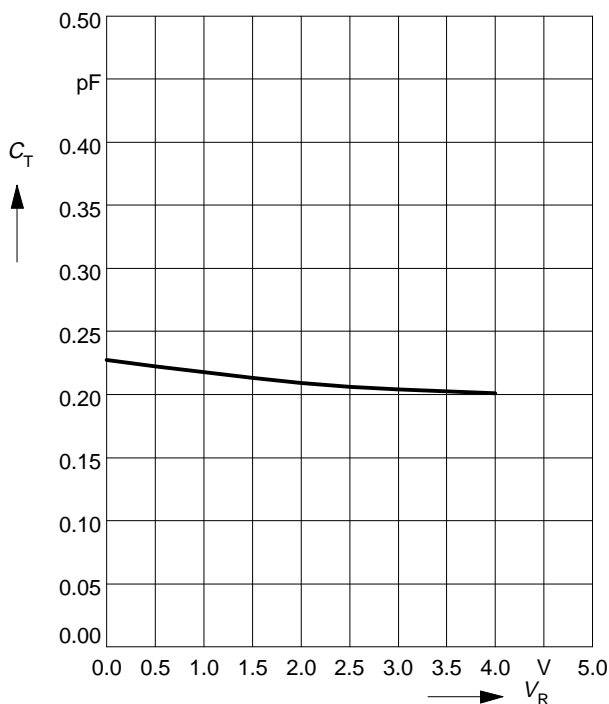
1) Package mounted on epoxy pcb 40mm x 40mm x 1.5mm / 0.5cm<sup>2</sup> Cu

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

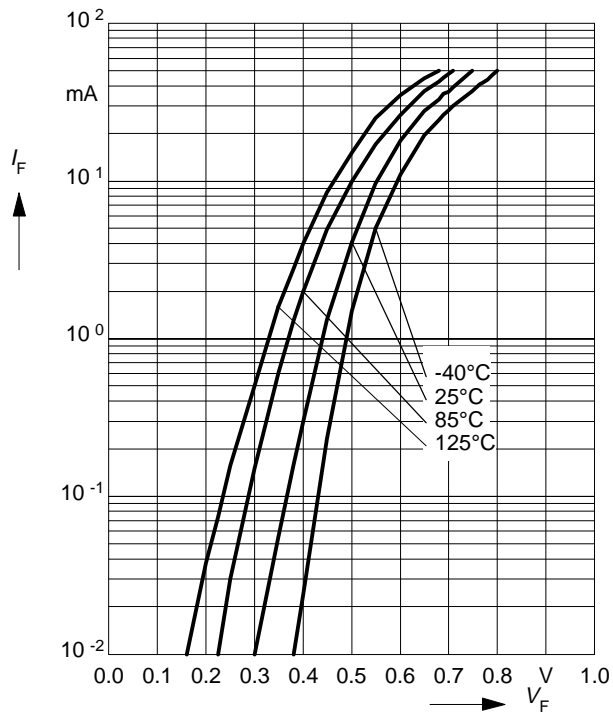
Parameter	Symbol	Values			Unit
		min.	typ.	max.	
<b>DC characteristics</b>					
Breakdown voltage $I_{(BR)} = 5 \mu\text{A}$	$V_{(BR)}$	4	-	-	V
Forward voltage $I_F = 1 \text{ mA}$	$V_F$	0.36	0.43	0.52	V
$I_F = 10 \text{ mA}$		0.48	0.55	0.66	
Diode capacitance $V_R = 0, f = 1 \text{ MHz}$	$C_T$	-	0.22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

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

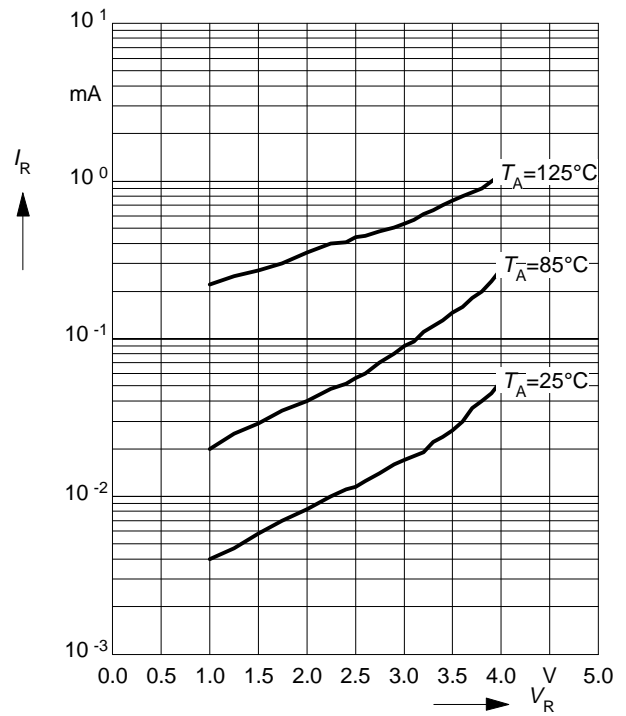
$f = 1\text{MHz}$



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



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



## Package

