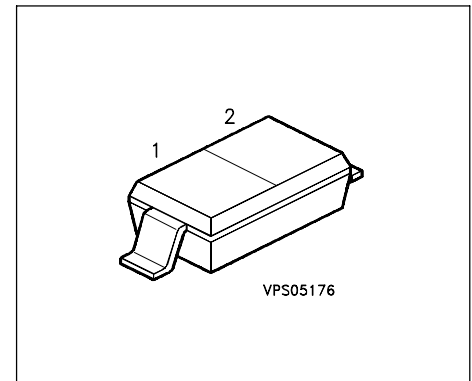


Silicon Schottky Diode

- DBS mixer applications to 12 GHz
- Low noise figure
- Low barrier type



ESD: ElectroStatic Discharge sensitive device, observe handling precautions!

Type	Marking	Ordering Code	Pin Configuration			Package
BAT 15-03W	P/white	Q62702-A1104	1 = A	2 = C		SOD-323

Maximum Ratings

Parameter	Symbol	Values	Unit
Diode reverse voltage	V_R	4	V
Forward current	I_F	100	mA
Total power dissipation $T_S = 70^\circ\text{C}$	P_{tot}	100	mW
Operating temperature range	T_{op}	- 55 ... + 150	$^\circ\text{C}$
Storage temperature	T_{stg}	- 55 ... + 150	

Thermal Resistance

Junction ambient ¹⁾	R_{thJA}	≤ 770	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.	

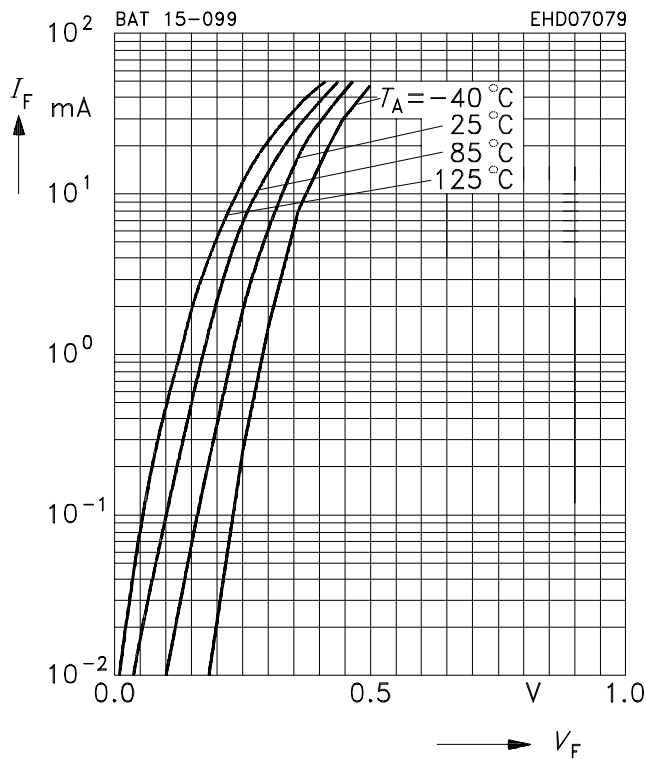
DC characteristics

Breakdown voltage $I_{(BR)} = 5 \mu\text{A}$	$V_{(BR)}$	4	-	-	V
Forward voltage $I_F = 1 \text{ mA}$	V_F	-	0.23	0.32	
$I_F = 10 \text{ mA}$		-	0.32	0.41	

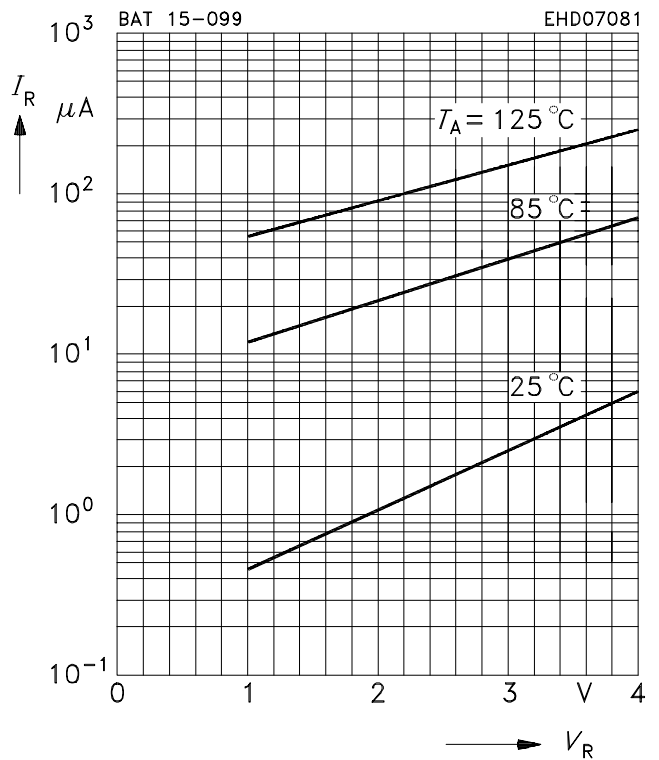
AC characteristics

Diode capacitance $V_R = 0$, $f = 1 \text{ MHz}$	C_T	-	-	0.35	pF
Differential forward resistance $I_F 10\text{mA}/ 50 \text{ mA}$	R_F	-	5.5	-	Ω

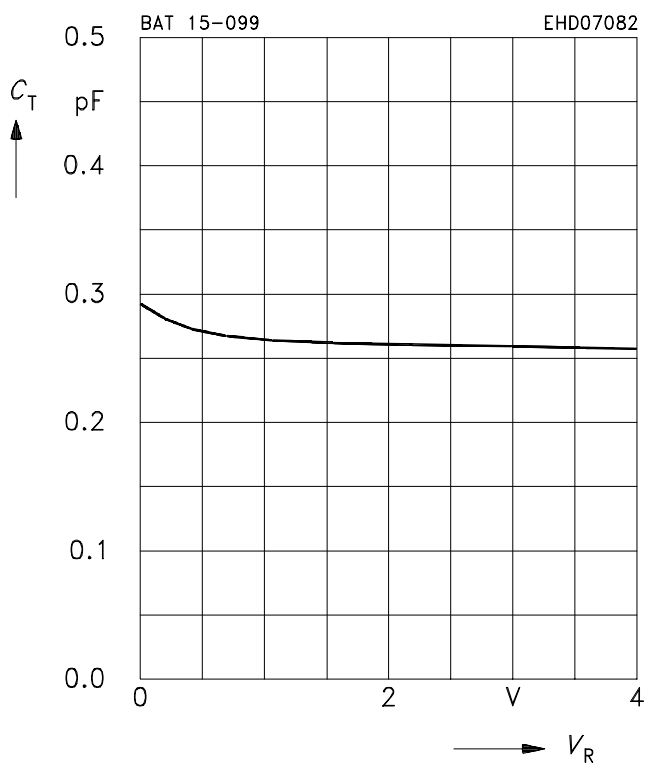
Forward Current $I_F = f(V_F)$



Reverse current $I_R = f(T_A)$



Diode capacitance $C_T = f(V_R)$ $f = 1\text{MHz}$



Package

