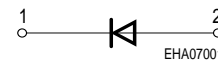
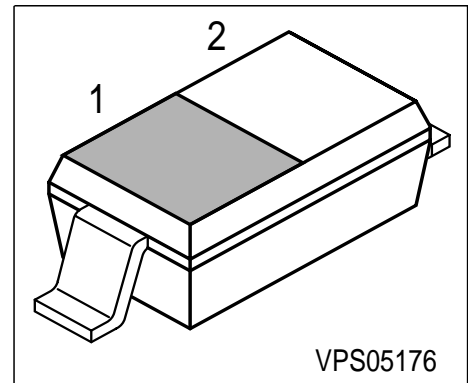


**Silicon Schottky Diode**

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



**ESD: Electrostatic discharge sensitive device, observe handling precaution!**

Type	Marking	Pin Configuration		Package
BAT15-03W	P/white	1 = C	2 = A	SOD323

**Maximum Ratings**

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

**Thermal Resistance**

Junction - soldering point <sup>1)</sup>	$R_{thJS}$	≤690	K/W
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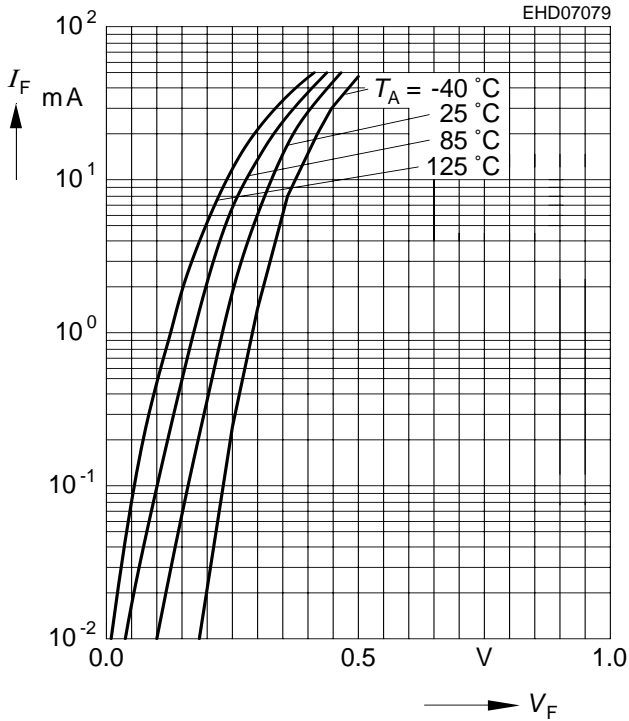
<sup>1)</sup>For calculation of  $R_{thJA}$  please refer to Application Note Thermal Resistance

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

Parameter	Symbol	Values			Unit
		min.	typ.	max.	
<b>DC characteristics</b> (per diode)					
Breakdown voltage $I_{(BR)} = 5\text{ }\mu\text{A}$	$V_{(BR)}$	4	-	-	V
Forward voltage $I_F = 1\text{ mA}$	$V_F$	-	0.23	0.32	
$I_F = 10\text{ mA}$		-	0.32	0.41	
<b>AC characteristics</b> (per diode)					
Diode capacitance $V_R = 0\text{ V}, f = 1\text{ MHz}$	$C_T$	-	-	0.35	pF
Forward resistance $I_F = 10\text{ mA} / 50\text{ mA}$	$R_F$	-	5.5	-	$\Omega$

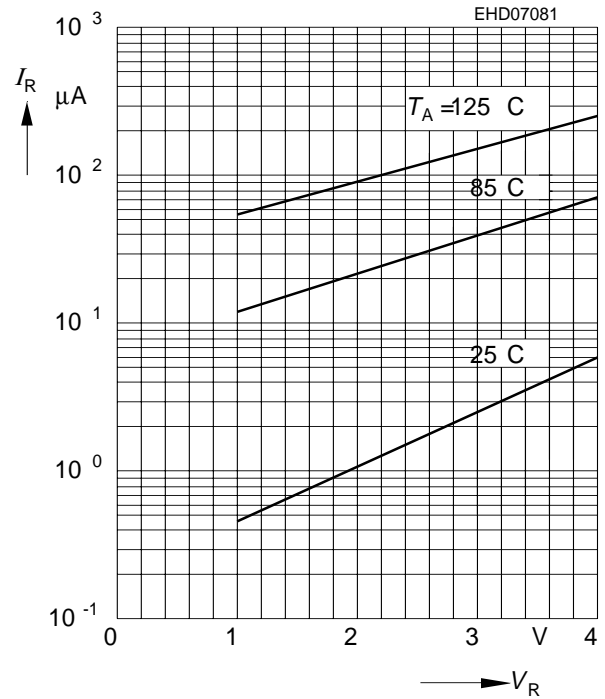
**Forward current  $I_F = f(V_F)$**

$T_A = \text{Parameter}$



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

$T_A = \text{Parameter}$



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

$f = 1\text{MHz}$

