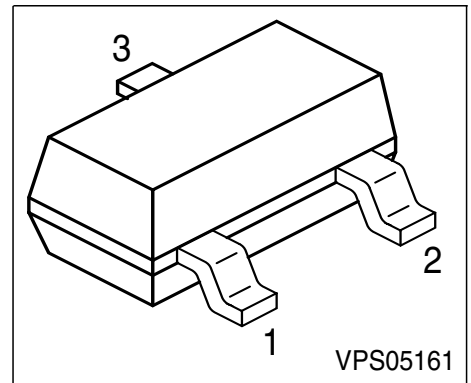
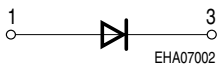
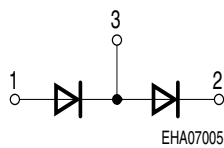
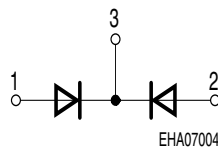
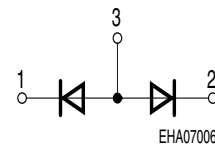


**Silicon Schottky Diode**

- For mixer applications in the VHF / UHF range
- For high-speed switching applications


**BAT 17**

**BAT 17-04**

**BAT 17-05**

**BAT 17-06**


Type	Marking	Pin Configuration			Package
BAT 17	53s	1 = A	2 n.c.	3 = C	SOT-23
BAT 17-04	54s	1 = A1	2 = C2	3 = C1/A2	SOT-23
BAT 17-05	55s	1 = A1	2 = A2	3 = C1/2	SOT-23
BAT 17-06	56s	1 = C1	2 = C2	3 = A1/2	SOT-23

**Maximum Ratings**

Parameter	Symbol	Value	Unit
Diode reverse voltage	$V_R$	4	V
Forward current	$I_F$	130	mA
Total power dissipation, $T_S \leq 60 \text{ }^\circ\text{C}$	$P_{tot}$	150	mW
Junction temperature	$T_j$	150	$^\circ\text{C}$
Operating temperature range	$T_{op}$	-55 ... 150	
Storage temperature	$T_{stg}$	-55 ... 150	

**Thermal Resistance**

Junction - ambient <sup>1)</sup>	$R_{thJA}$	$\leq 750$	K/W
Junction - soldering point	$R_{thJS}$	$\leq 590$	

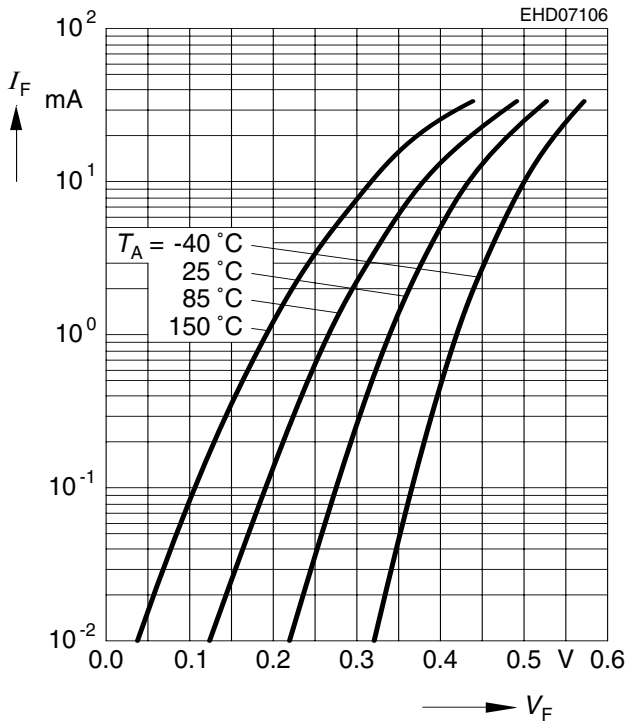
1) Package mounted on epoxy pcb 40mm x 40mm x 1.5mm / 1cm<sup>2</sup> Cu

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

Parameter	Symbol	Values			Unit
		min.	typ.	max.	
<b>DC characteristics</b>					
Breakdown voltage $I_{(BR)} = 10\ \mu\text{A}$	$V_{(BR)}$	4	-	-	V
Reverse current $V_R = 3\ \text{V}$ $V_R = 4\ \text{V}$	$I_R$	-	-	0.25 10	$\mu\text{A}$
Reverse current $V_R = 3\ \text{V}, T_A = 60\text{ °C}$	$I_R$	-	-	1.25	
Forward voltage $I_F = 0.1\ \text{mA}$ $I_F = 1\ \text{mA}$ $I_F = 10\ \text{mA}$	$V_F$	200 250 350	275 340 425	350 450 600	mV
<b>AC characteristics</b>					
Diode capacitance $V_R = 0\ \text{V}, f = 1\ \text{MHz}$	$C_T$	0.4	0.55	0.75	pF
Differential forward resistance $I_F = 5\ \text{mA}, f = 10\ \text{kHz}$	$r_f$	-	8	15	$\Omega$

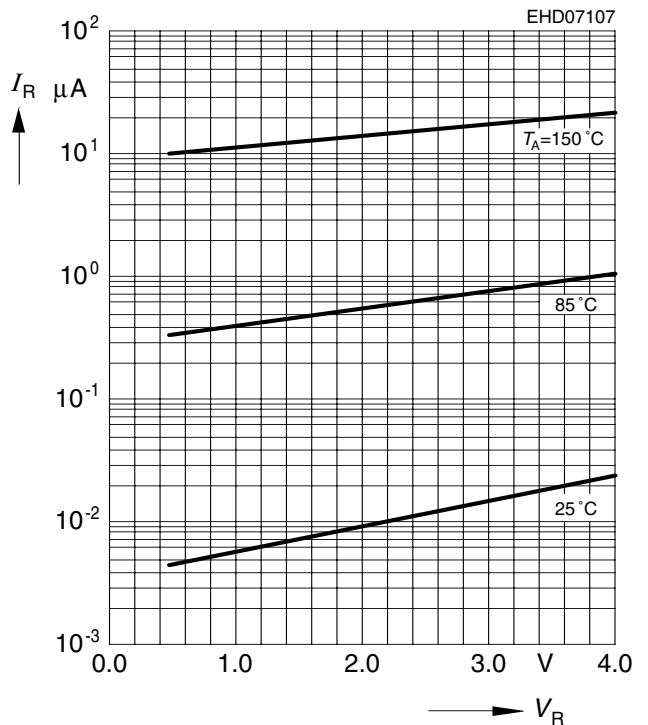
**Forward current  $I_F = f(V_F)$**

$T_A = \text{Parameter}$



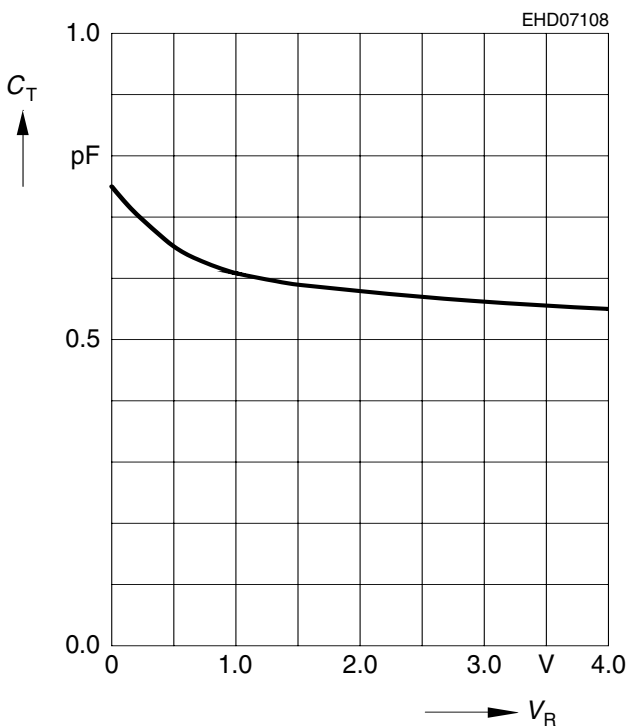
**Reverse current  $I_R = f(V_R)$**

$T_A = \text{Parameter}$



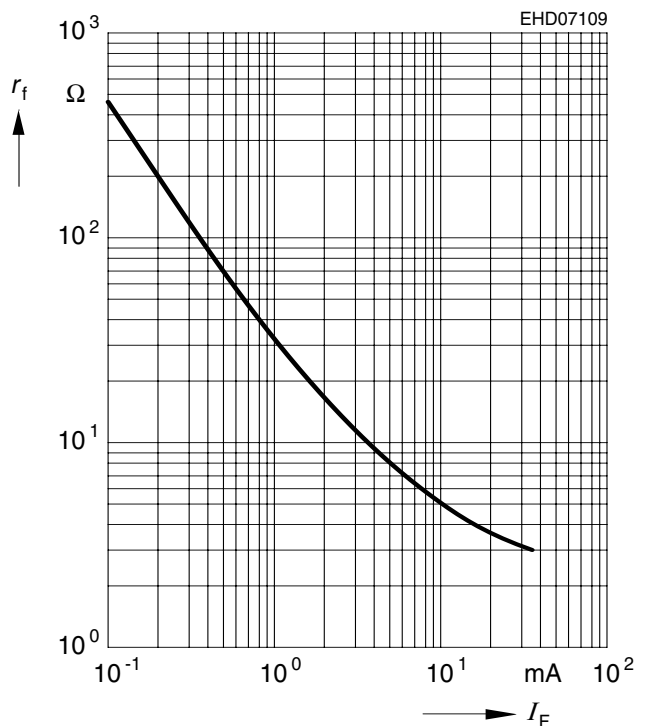
**Diode capacitance  $C_T = f(V_R)$**

$f = 1\text{MHz}$



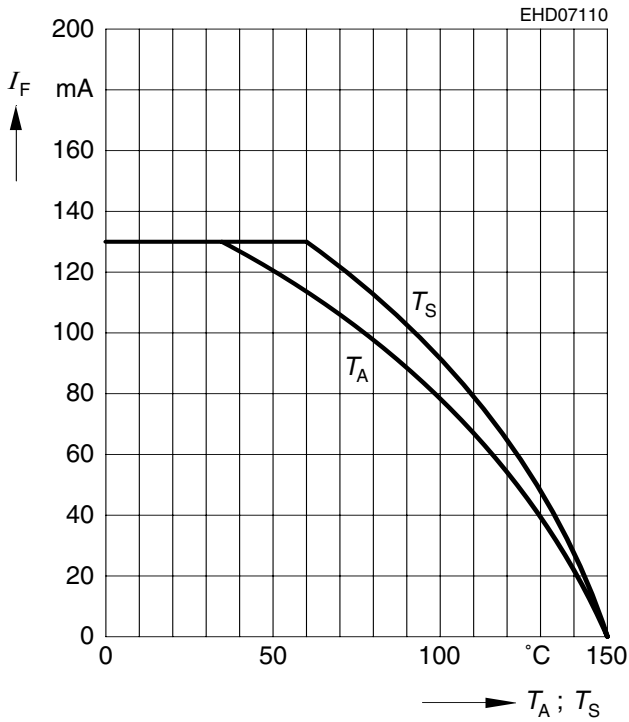
**Differential forward resistance  $r_f = f(I_F)$**

$f = 10\text{kHz}$



**Forward current  $I_F = f(T_A^*; T_S)$**

\* Package mounted on epoxy



This datasheet has been download from:

[www.datasheetcatalog.com](http://www.datasheetcatalog.com)

Datasheets for electronics components.