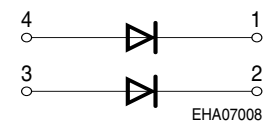
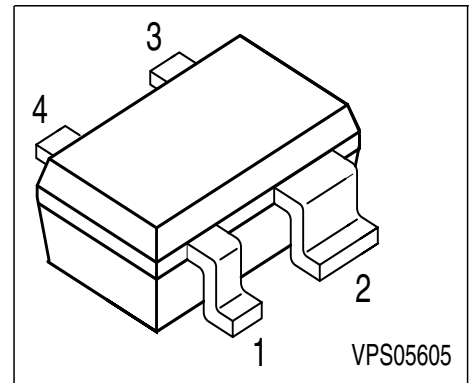


**Silicon Schottky Diode**

- Low barrier diode for detectors up to GHz frequencies



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

Type	Marking	Pin Configuration				Package
BAT 62-07W	62s	1=C1	2=C2	3=A2	4=A1	SOT-343

**Maximum Ratings**

Parameter	Symbol	Value	Unit
Diode reverse voltage	$V_R$	40	V
Forward current	$I_F$	20	mA
Total power dissipation, $T_S = 103\text{ °C}$	$P_{tot}$	100	mW
Junction temperature	$T_j$	150	°C
Storage temperature	$T_{stg}$	-55 ... 150	

**Thermal Resistance**

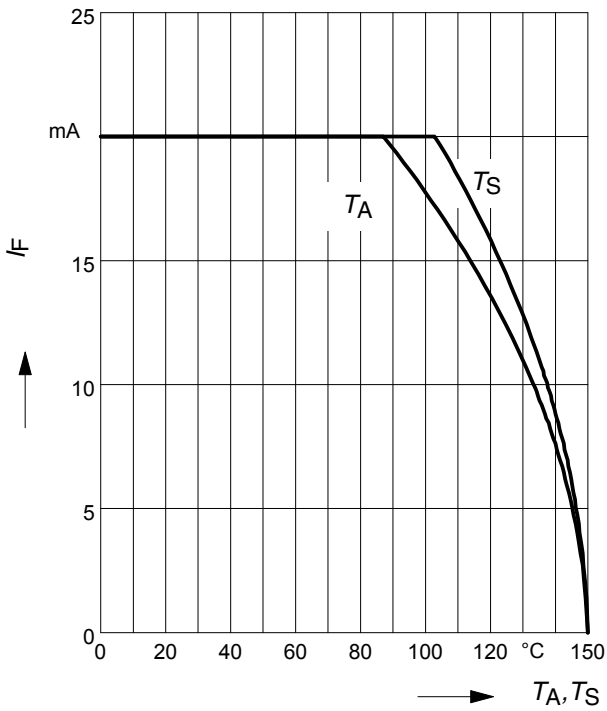
Junction - ambient <sup>1)</sup>	$R_{thJA}$	≤ 630	K/W
Junction - soldering point	$R_{thJS}$	≤ 470	

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

Parameter	Symbol	Values			Unit
		min.	typ.	max.	
<b>DC characteristics</b>					
Reverse current $V_R = 40\text{ V}$	$I_R$	-	-	10	$\mu\text{A}$
Forward voltage $I_F = 2\text{ mA}$	$V_F$	-	0.58	1	V
<b>AC characteristics</b>					
Diode capacitance $V_R = 0\text{ V}, f = 1\text{ MHz}$	$C_T$	-	0.35	0.6	pF
Case capacitance $f = 1\text{ MHz}$	$C_C$	-	0.1	-	
Differential resistance $V_R = 0, f = 10\text{ kHz}$	$R_0$	-	225	-	$\text{k}\Omega$
Series inductance	$L_s$	-	1.8	-	nH

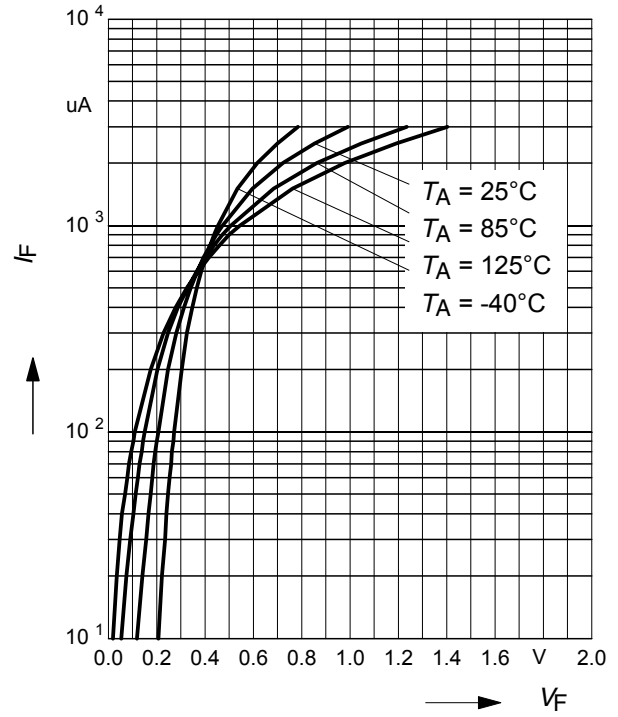
**Forward current  $I_F = f(T_A^*; T_S)$**

\* mounted on alumina



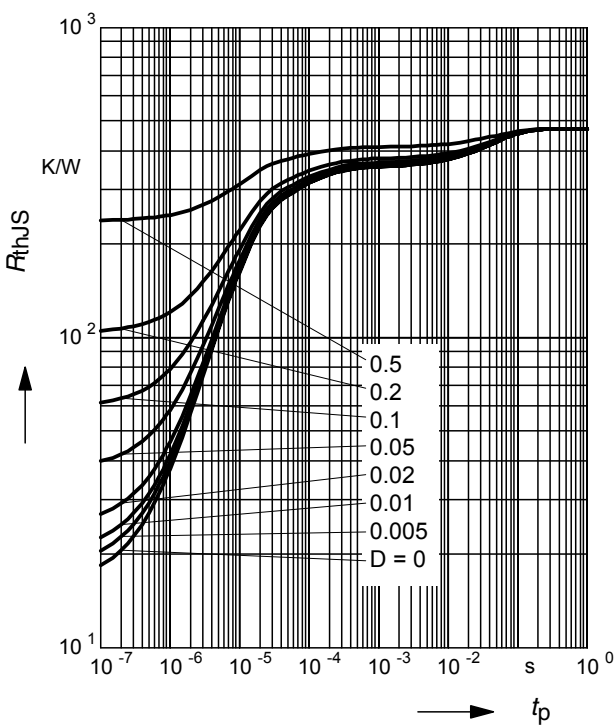
**Forward current  $I_F = f(V_F)$**

$T_A = \text{parameter}$

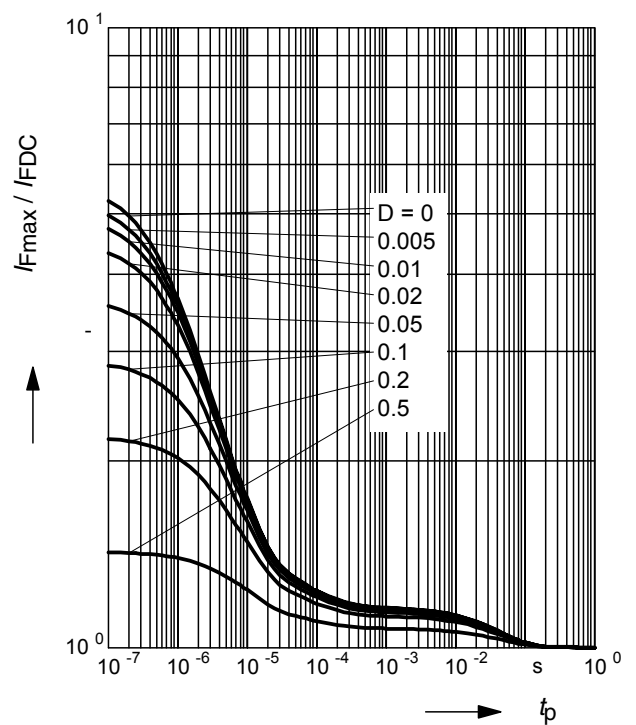


**Permissible Pulse Load**

$I_{Fmax} / I_{FDC} = f(t_p)$

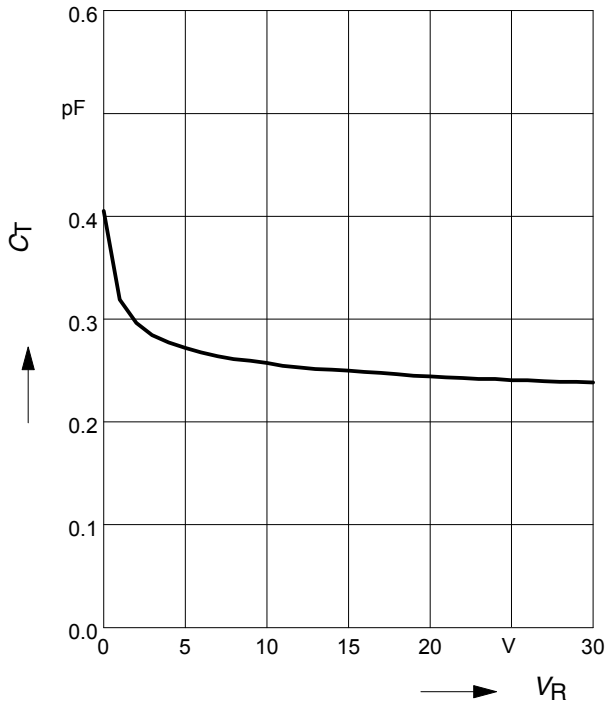


**Permissible pulse load  $I_{Fmax} / I_{FDC} = f(t_p)$**



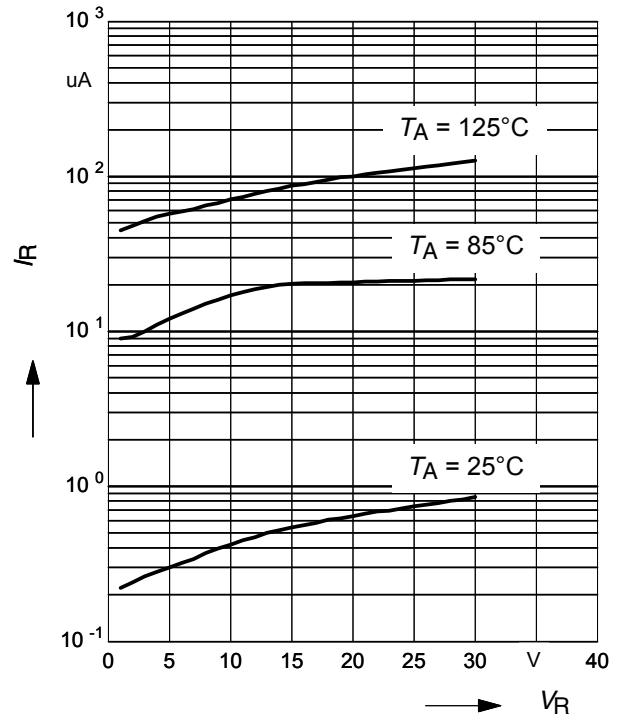
**Diode capacitance  $C_T = f(V_R)$**

$f = 1\text{MHz}$



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

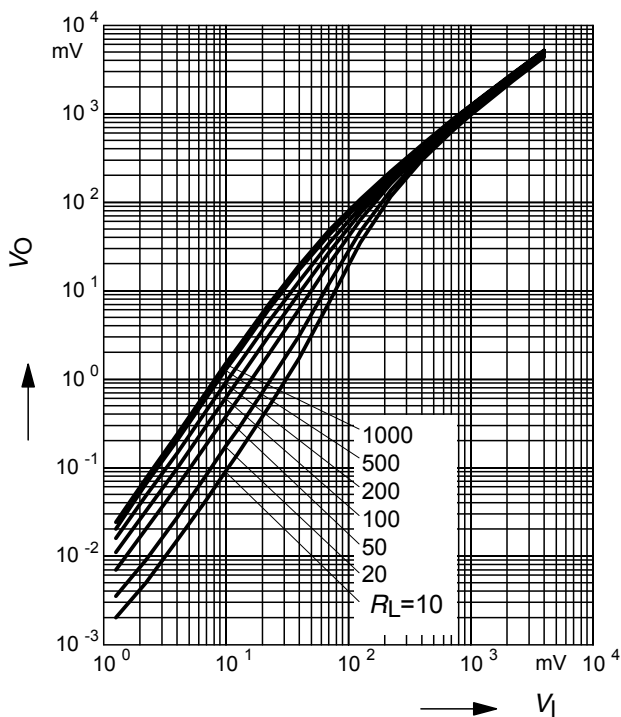
$T_A = \text{Parameter}$



**Rectifier voltage  $V_{out} = f(V_{in})$**

$f = 900\text{MHz}$

$R_L = \text{parameter in k}\Omega$



Testcircuit:

