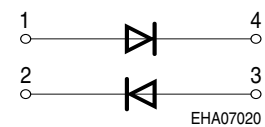
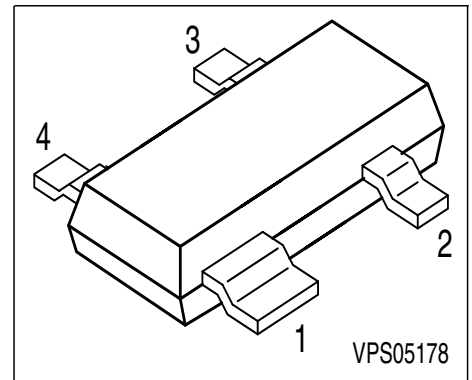


Silicon Schottky Diode

- Low barrier diode for detectors up to GHz frequencies



ESD: Electrostatic discharge sensitive device, observe handling precaution!

Type	Marking	Pin Configuration				Package
BAT 62	62s	1 = A1	2 = C2	3 = A2	4 = C1	SOT-143

Maximum Ratings

Parameter	Symbol	Value	Unit
Diode reverse voltage	V_R	40	V
Forward current	I_F	20	mA
Total power dissipation, $T_S \leq 85^\circ\text{C}$	P_{tot}	100	mW
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 ... 150	

Thermal Resistance

Junction - ambient ¹⁾	R_{thJA}	≤ 810	K/W
Junction - soldering point	R_{thJS}	≤ 650	

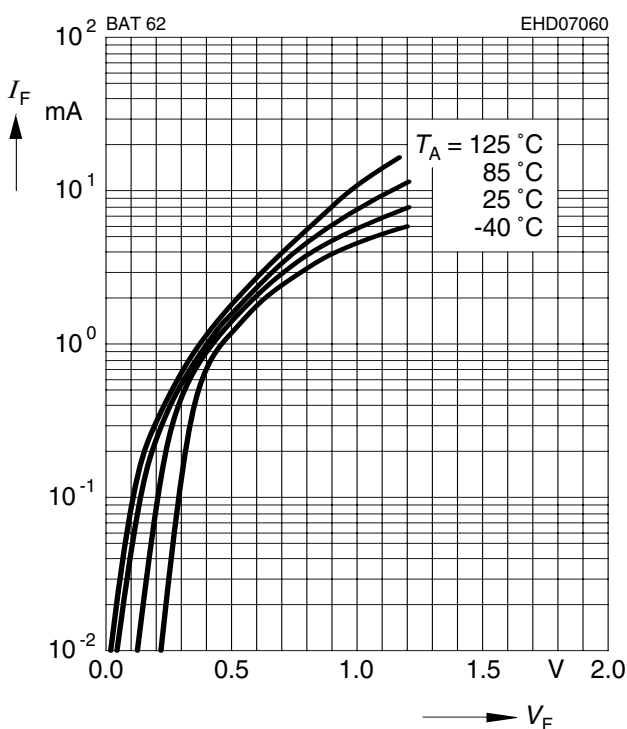
1) Package mounted on alumina 15mm x 16.7mm x 0.7mm

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

Parameter	Symbol	Values			Unit
		min.	typ.	max.	
DC characteristics					
Reverse current $V_R = 40\text{ V}$	I_R	-	-	10	μA
Forward voltage $I_F = 2\text{ mA}$	V_F	-	0.85	1	V
AC characteristics					
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 $V_R = 0\text{ V}, f = 10\text{ kHz}$	R_0	-	225	-	k Ω
Series inductance	L_s	-	2	-	nH

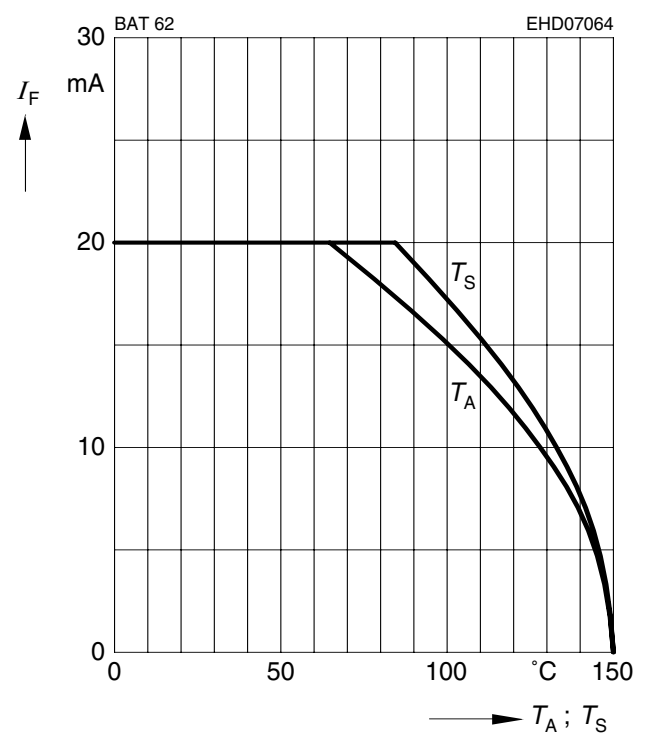
Forward current $I_F = f(V_F)$

$T_A = \text{Parameter}$



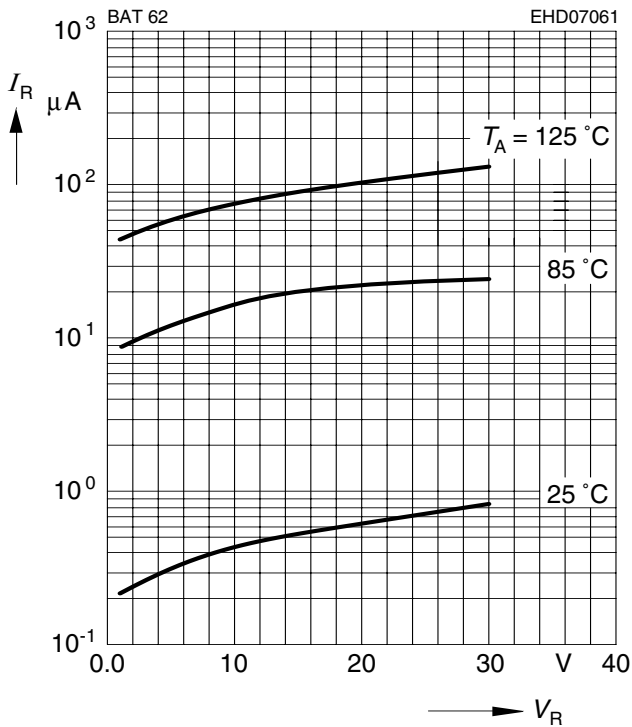
Forward current $I_F = f(T_A^*; T_S)$

* Package mounted on alumina



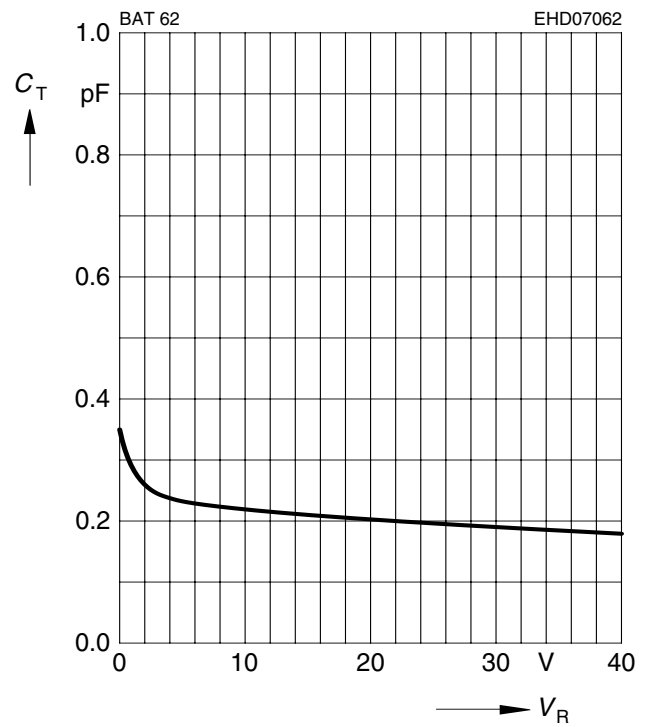
Reverse current $I_R = f(V_R)$

$T_A = \text{Parameter}$



Diode capacitance $C_T = f(V_R)$

$f = 1\text{MHz}$



Rectifier voltage $V_O = f(V_i)$

$f = 900\text{MHz}$

