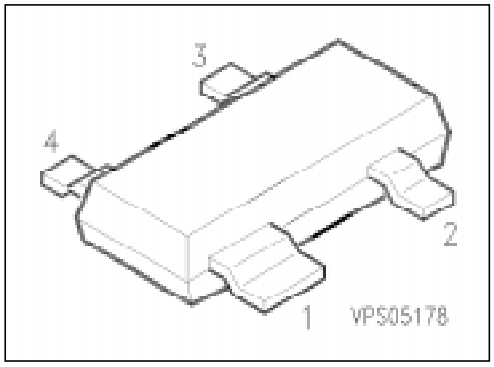
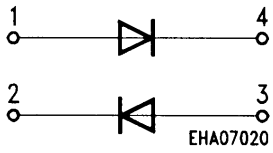
SIEMENS

Silicon Schottky Diode — BAT 62

- Low barrier diode for detectors up to GHz frequencies.



ESD: **E**lectro**s**tatic **d**ischarge sensitive device, observe handling precautions!

Type	Marking	Ordering Code (tape and reel)	Pin Configuration	Package[1)]
BAT 62	62	Q62702-A971		SOT-143

Maximum Ratings per Diode

Parameter	Symbol	Values	Unit
Reverse voltage	V_R	40	V
Forward current	I_F	20	mA
Total power dissipation, $T_S \leq 85$ °C	P_{tot}	100	mW
Junction temperature	T_j	150	°C
Storage temperature range	T_{stg}	– 55 … + 150	

Thermal Resistance

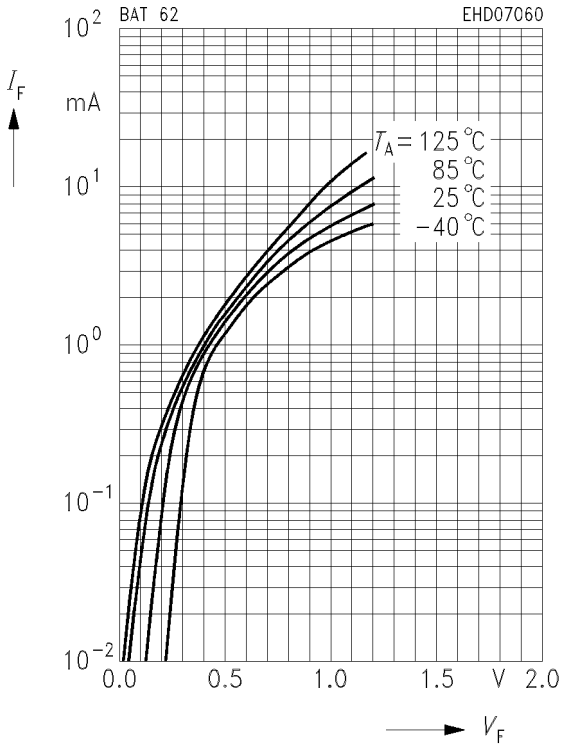
Junction - ambient[2)]	$R_{th\ JA}$	≤ 810	K/W
Junction - soldering point	$R_{th\ JS}$	≤ 650	

1) For detailed information see chapter Package Outlines.
2) Package mounted on alumina 15 mm × 16.7 mm × 0.7 mm.

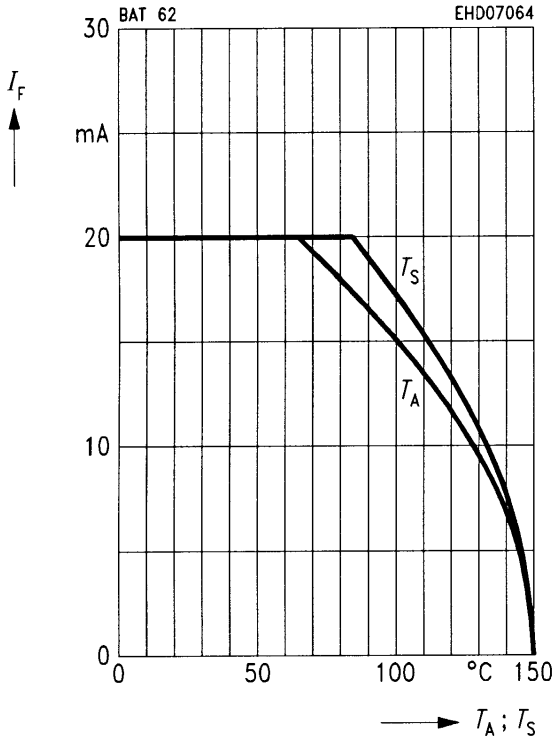
Electrical Characteristics per Diode
at T_A = 25 °C, unless otherwise specified.

Parameter	Symbol	Values			Unit
		min.	typ.	max.	
Reverse current V_R = 40 V	I_R	–	–	10	µA
Forward voltage I_F = 2 mA	V_F	–	0.58	1	V
Diode capacitance V_R = 0, f = 1 MHz	C_T	–	0.35	0.6	pF
Case capacitance	C_C	–	0.1	–	
Differential resistance V_R = 0, f = 10 kHz	R_0	–	225	–	kΩ
Series inductance	L_S	–	2	–	nH

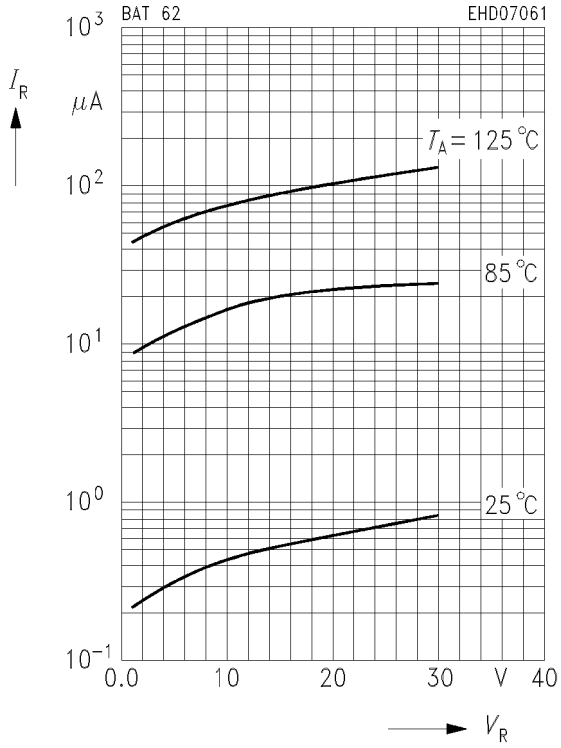
Forward current $I_F = f(V_F)$



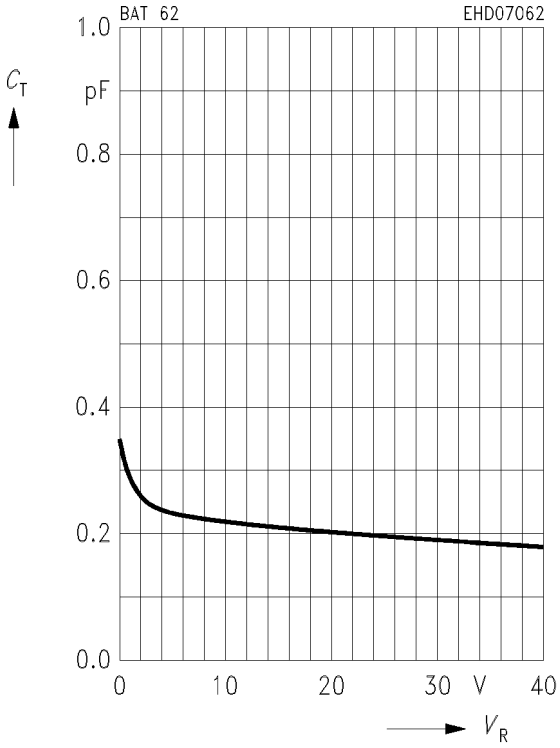
Forward current $I_F = f(T_S; T_A^*)$
*Package mounted on alumina



Reverse current $I_R = f(V_R)$
f= 1 MHz



Diode capacitance $C_T = f(V_R)$
f= 1 MHz



Rectifier voltage $V_0 = f(V_i)$
f= 900 MHz