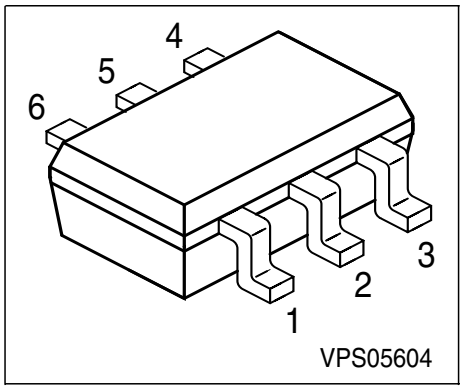
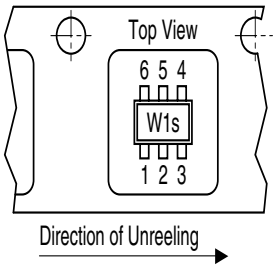
Silicon Schottky Diode Array

Preliminary data

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



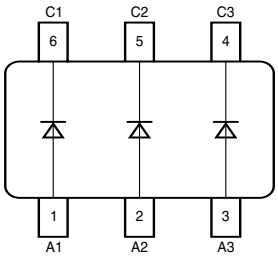
Tape loading orientation



Marking on SOT-363 package
(for example W1s)
corresponds to pin 1 of device

Position in tape: pin 1
opposite of feed hole side

EHA07193



EHA07291

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

Type	Marking	Pin Configuration						Package
BAT 68-08S	83s	1=A1	2=A2	3=A3	4=C3	5=C2	6=C1	SOT-363

Maximum Ratings

Parameter	Symbol	Value	Unit
Diode reverse voltage	V_R	8	V
Forward current	I_F	130	mA
Total power dissipation, $T_S \leq 40°C$	P_{tot}	150	mW
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	-55 ... 150	

Thermal Resistance

Junction - ambient [1)]	R_{thJA}	≤ 640	K/W
Junction - soldering point	R_{thJS}	≤ 390	

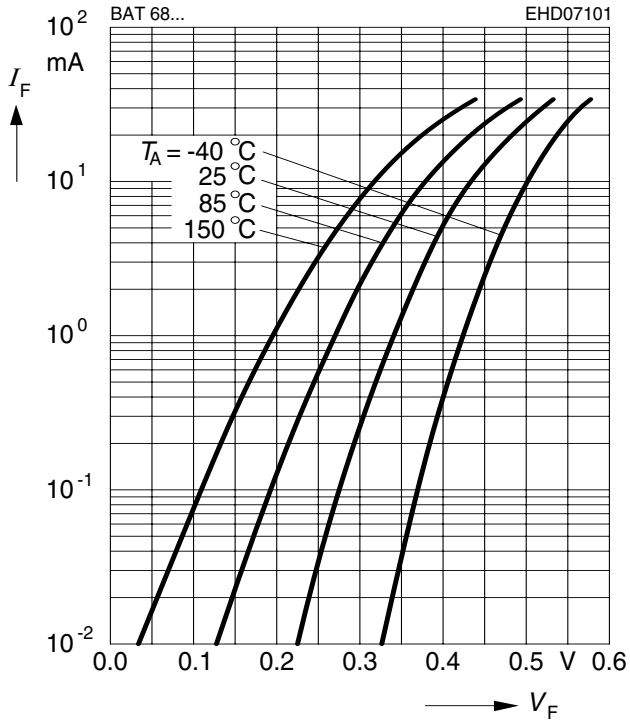
1) Package mounted on alumina 15mm x 16.7mm x 0.7mm

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

Parameter	Symbol	Values			Unit
		min.	typ.	max.	
Characteristics					
Breakdown voltage $I_{(BR)}$ = 10 µA	$V_{(BR)}$	8	-	-	V
Reverse current V_R = 1 V	I_R	-	-	0.1	µA
Reverse current V_R = 1 V, T_A = 150 °C	I_R	-	-	1.2	
Forward voltage I_F = 1 mA I_F = 10 mA	V_F	 - 330	 318 390	 340 500	mV
AC characteristics					
Diode capacitance V_R = 0 V, f = 1 MHz	C_T	-	-	1	pF
Forward resistance I_F = 5 mA, f = 100 MHz	R_f	-	-	10	Ω

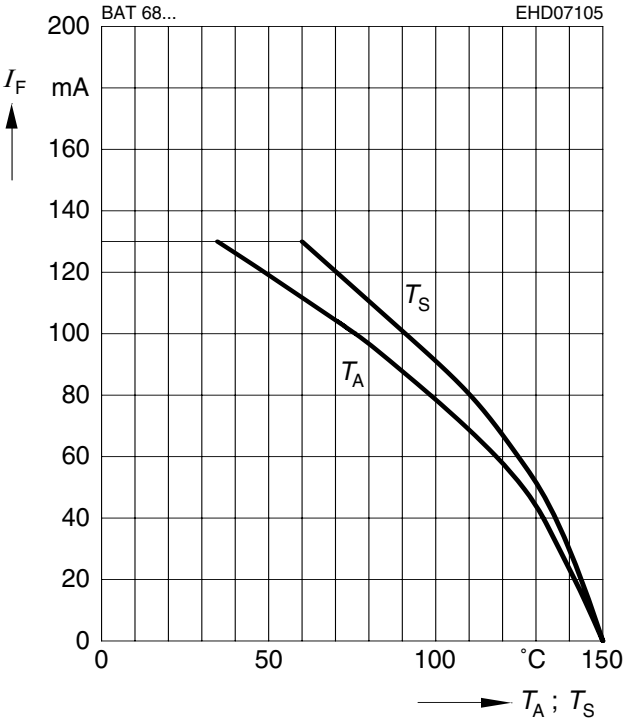
Forward current $I_F = f(V_F)$

T_A = Parameter



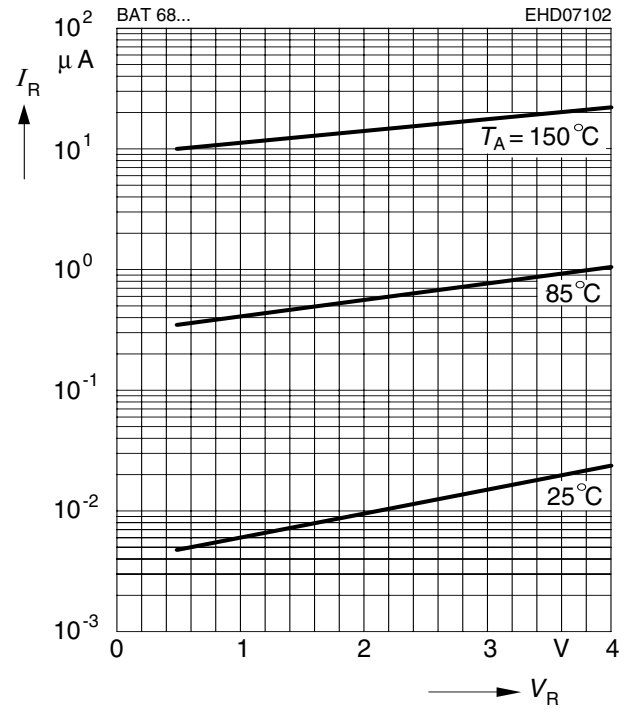
Forward current $I_F = f(T_A^*; T_S)$

* Package mounted on alumina



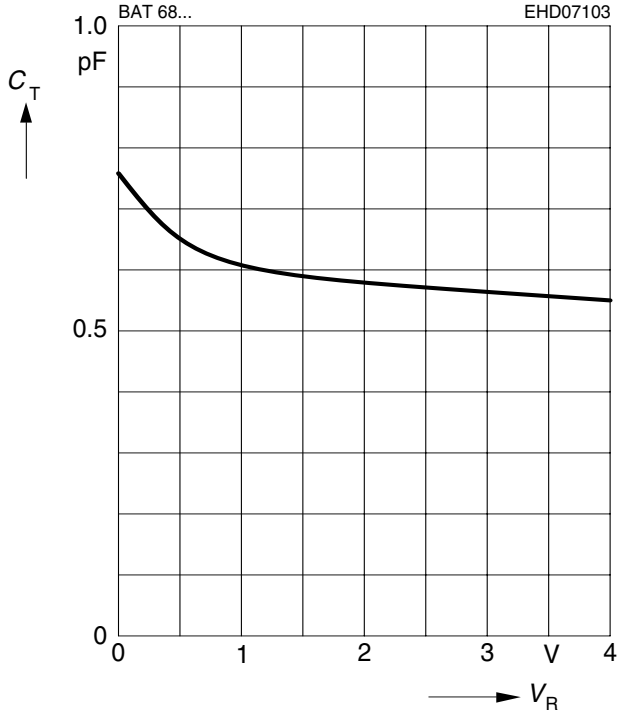
Reverse current $I_R = f(V_R)$

T_A = Parameter



Diode capacitance $C_T = f(V_R)$

f = 1MHz



Differential forward resistance $r_f = f(I_F)$

f = 10 kHz