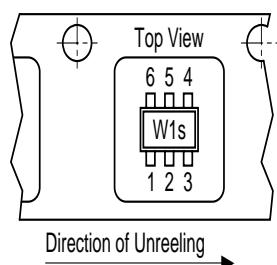


Silicon Schottky Diode Array

Preliminary data

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

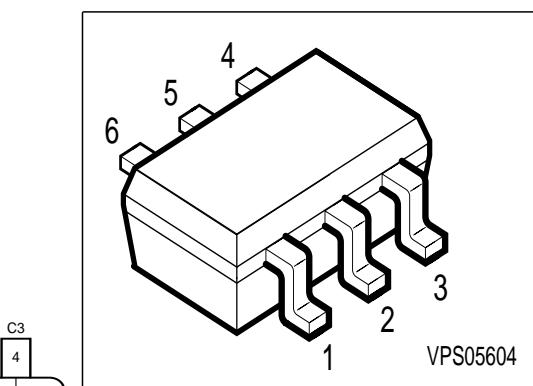
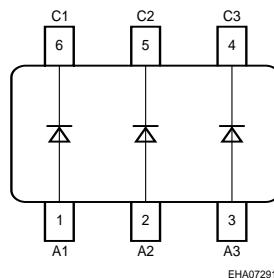
Tape loading orientation



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



VPS05604

ESD: Electrostatic discharge sensitive device, observe handling precautions!

Type	Marking	Ordering Code	Pin Configuration						Package
BAT 68-08S	83s	Q62702-A1344	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, $T_S \leq 40^\circ\text{C}$	P_{tot}	150	mW
Junction temperature	T_J	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55...+150	

Thermal Resistance

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

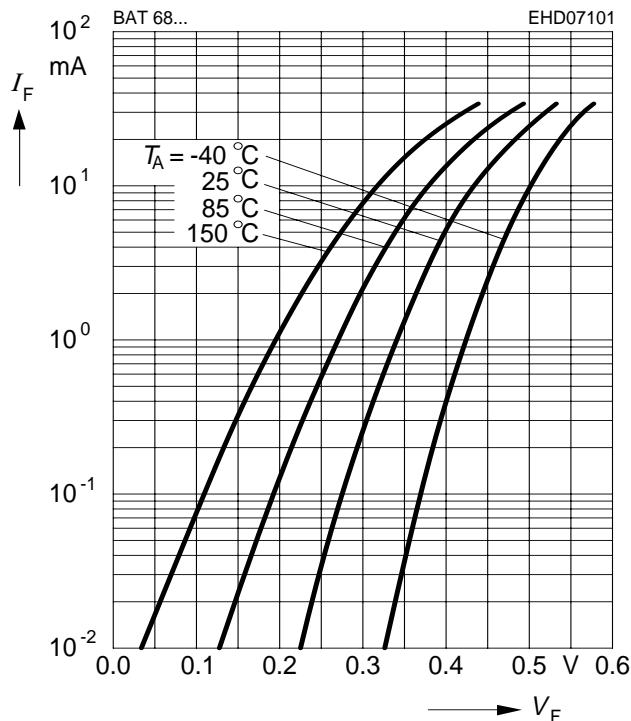
1) Package mounted on alumina 15mm x 16.7mm x 0.7mm

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

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

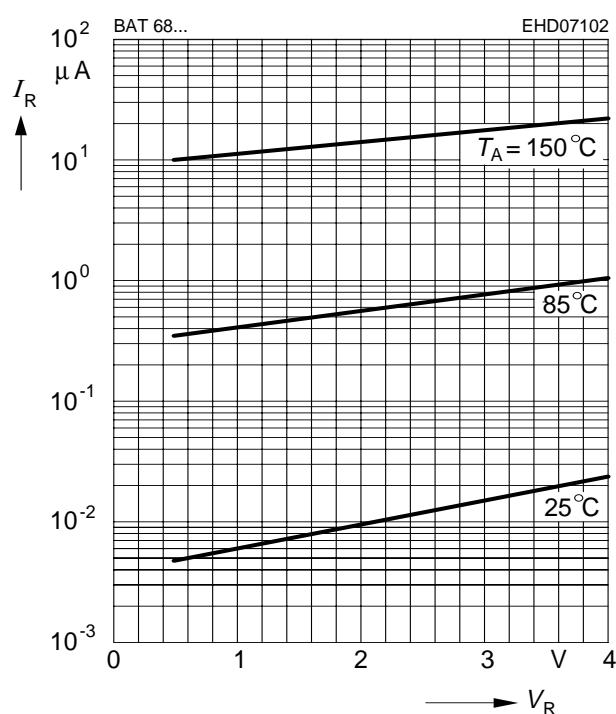
Forward current $I_F = f(V_F)$

T_A = Parameter



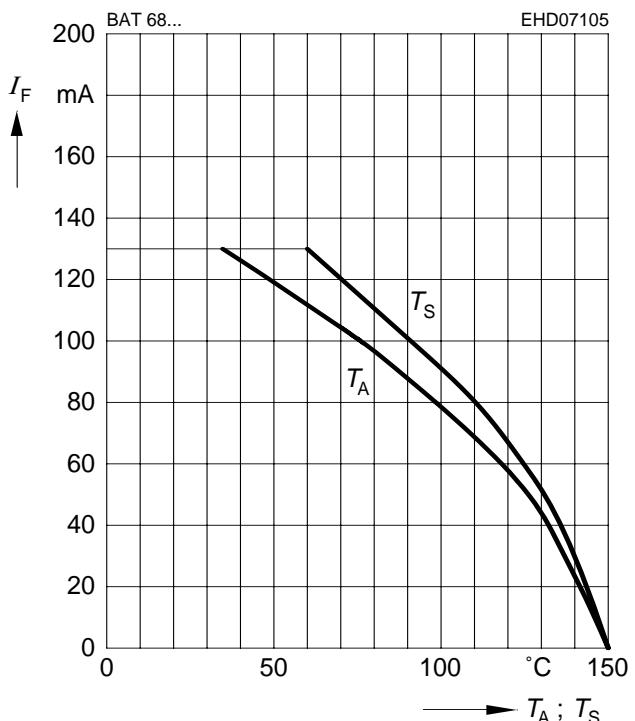
Reverse current $I_R = f(V_R)$

T_A = Parameter



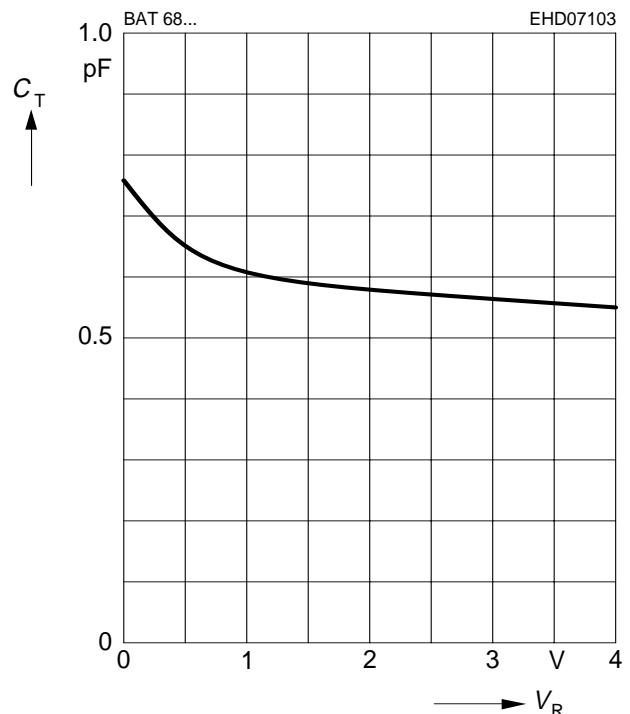
Forward current $I_F = f(T_A^*; T_S)$

* Package mounted on alumina



Diode capacitance $C_T = f(V_R)$

$f = 1\text{MHz}$



Differential forward resistance $r_f = f(I_F)$

$f = 10 \text{ kHz}$

