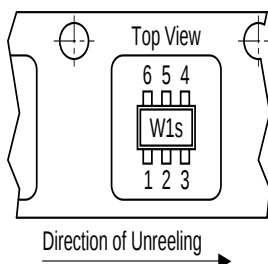


Silicon Schottky Diode Array

Preliminary data

- Low barrier diode for detectors up to GHz frequencies

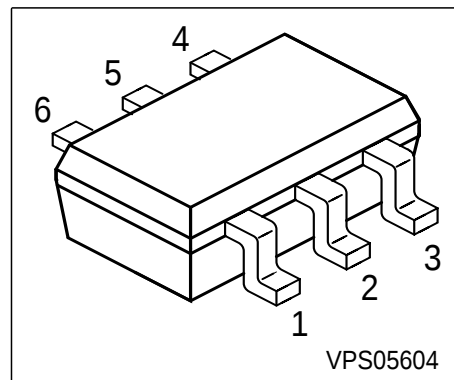
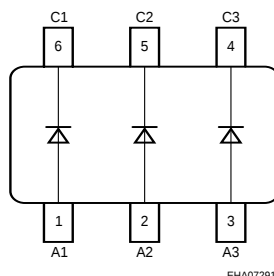
Tape loading orientation



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



ESD: Electrostatic discharge sensitive device, observe handling precautions!

Type	Marking	Pin Configuration						Package
BAT 62-08S	62s	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	40	V
Forward current	I_F	20	mA
Total power dissipation, $T_S \leq 105^\circ\text{C}$	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}	≤ 690	K/W
Junction - soldering point	R_{thJS}	≤ 450	

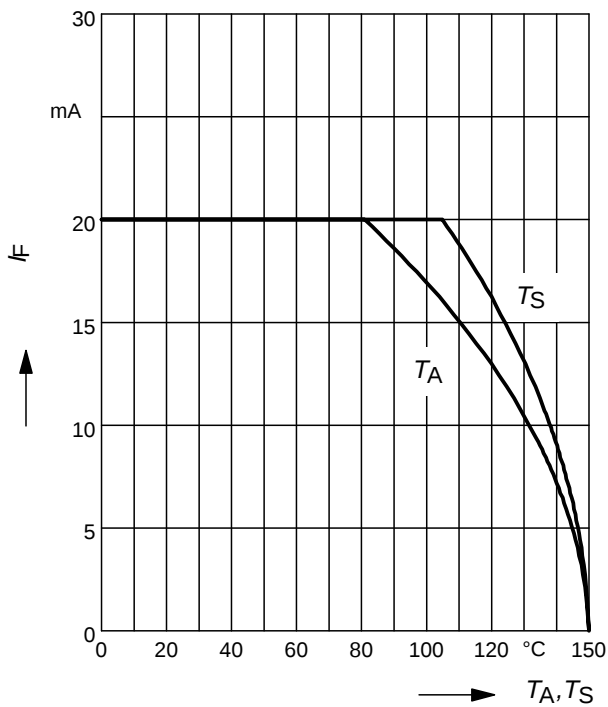
1) Package mounted on alumina 15mm x 16.7mm x 0.7mm

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

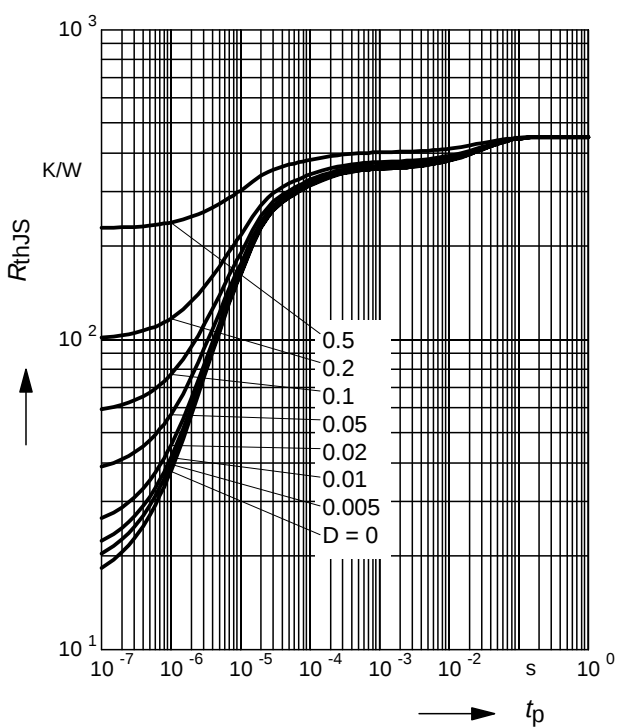
Parameter	Symbol	Values			Unit
		min.	typ.	max.	
DC characteristics					
Reverse current $V_R = 40\text{ V}$	I_R	-	-	10	μA
Forward voltage $I_F = 2\text{ mA}$	V_F	-	0.58	1	V
AC characteristics					
Diode capacitance $V_R = 0\text{ V}, f = 1\text{ MHz}$	C_T	-	0.35	0.6	pF
Case capacitance $f = 1\text{ MHz}$	C_C	-	0.1	-	
Differential resistance $V_R = 0\text{ V}, f = 10\text{ kHz}$	R_0	-	225	-	k Ω
Series inductance	L_S	-	1.6	-	nH

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

*) : mounted on alumina 15mm x 16.7mm x 0.7mm

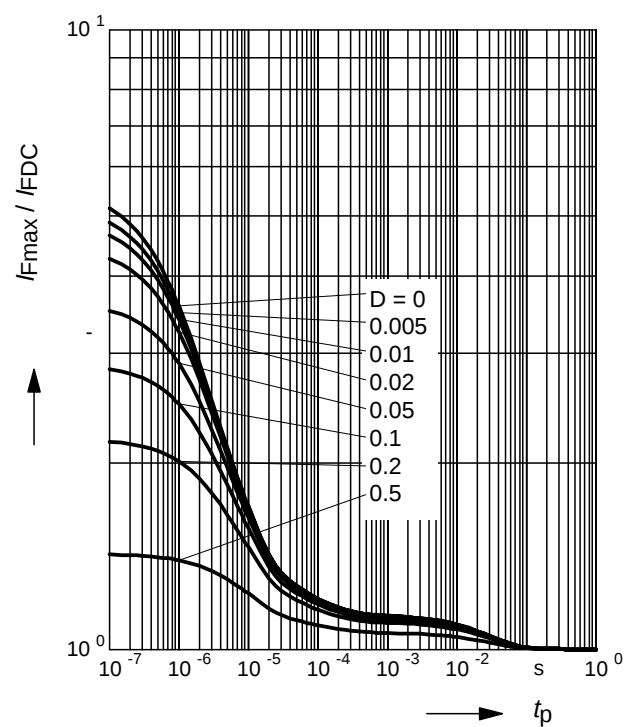


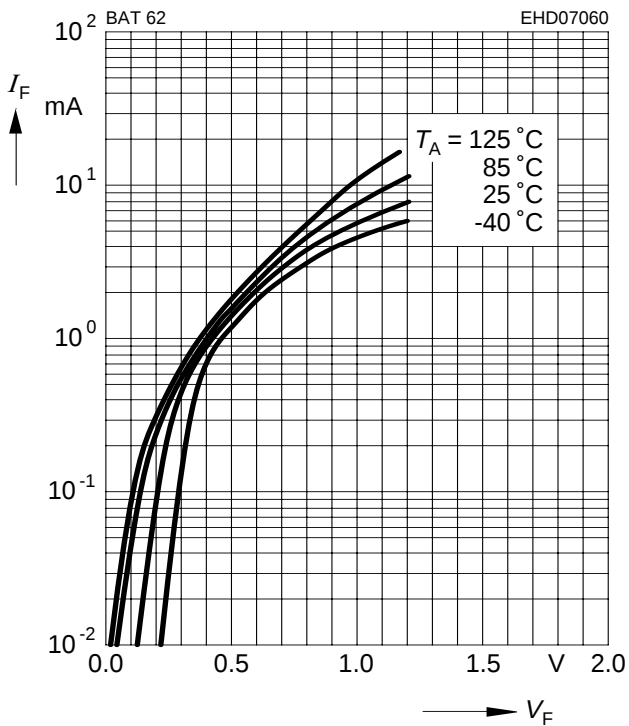
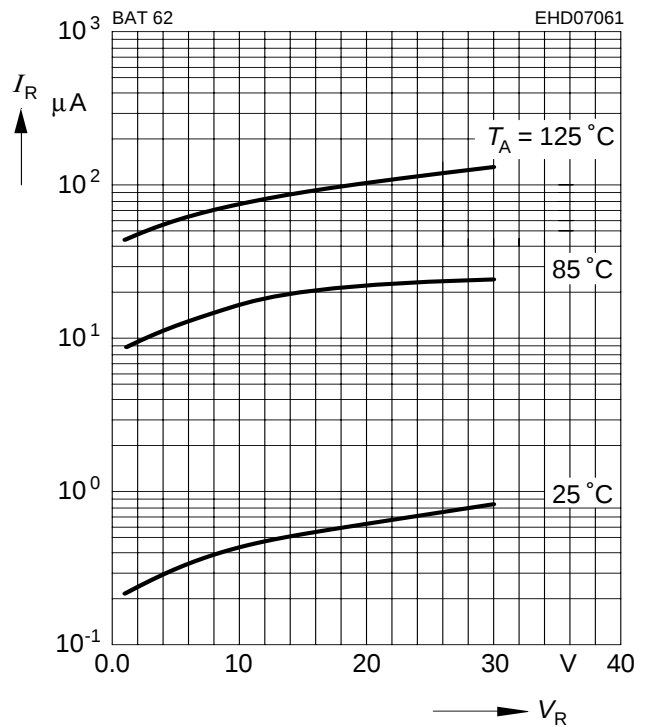
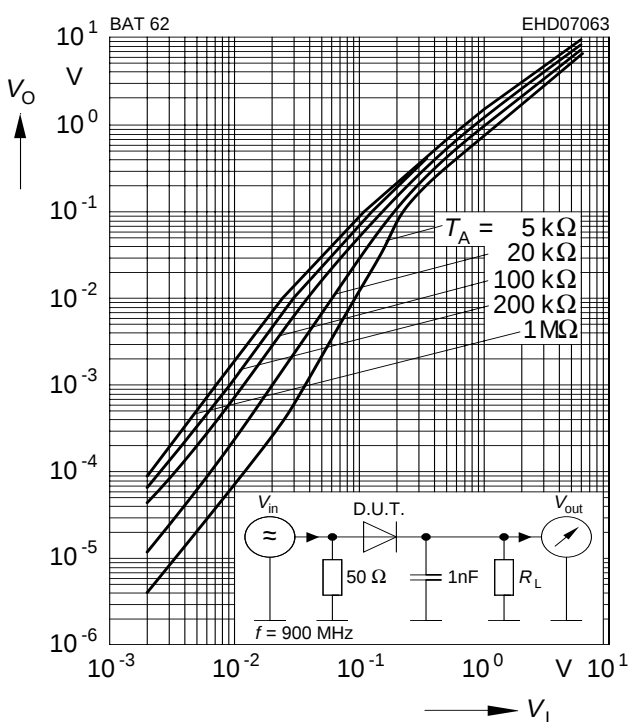
Permissible Pulse Load $R_{thJS} = f(t_p)$



Permissible Pulse Load

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



Forward current $I_F = f(V_F)$
 $T_A = \text{Parameter}$

Reverse current $I_R = f(V_R)$
 $T_A = \text{Parameter}$

Rectifier voltage $V_O = f(V_i)$
 $f = 900\text{MHz}$

Diode capacitance $C_T = f(V_R)$
 $f = 1\text{MHz}$
