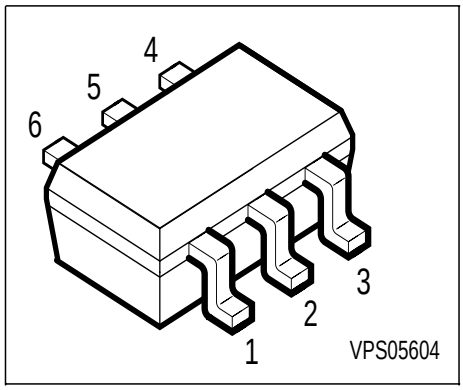
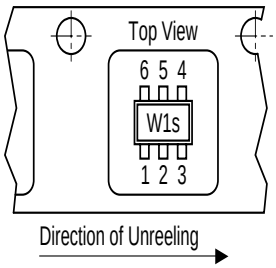
Silicon Schottky Diode Array

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

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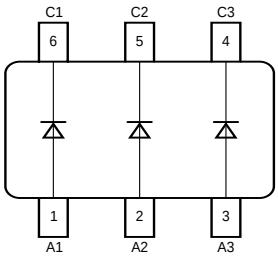

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ESD: **E**lectro**s**tatic **d**ischarge sensitive device, observe handling precautions!

Type	Marking	Ordering Code	Pin Configuration						Package
BAT 62-08S	62s	Q62702-A1343	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, $T_S \leq 105$ °C	P_{tot}	100	mW
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	-55...+150	

Thermal Resistance

Junction - ambient 1)	R_{thJA}	≤ 690	K/W
Junction - soldering point	R_{thJS}	≤ 450	

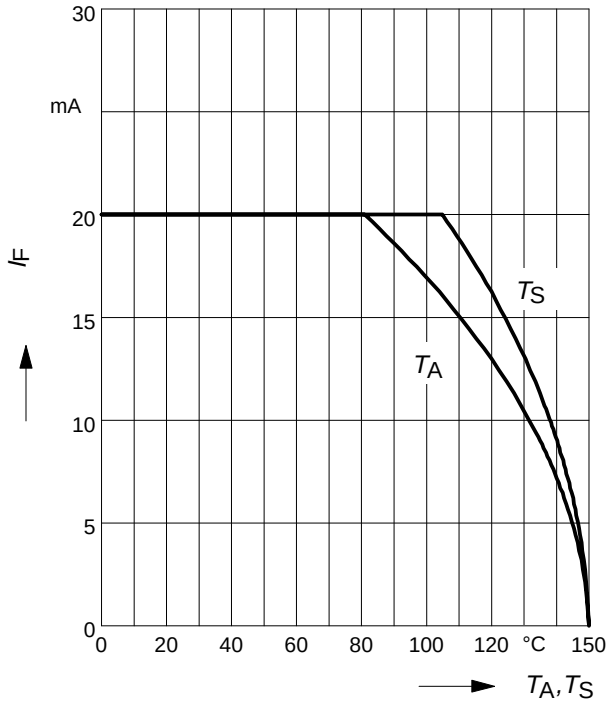
1) Package mounted on alumina 15mm x 16.7mm x 0.7mm

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

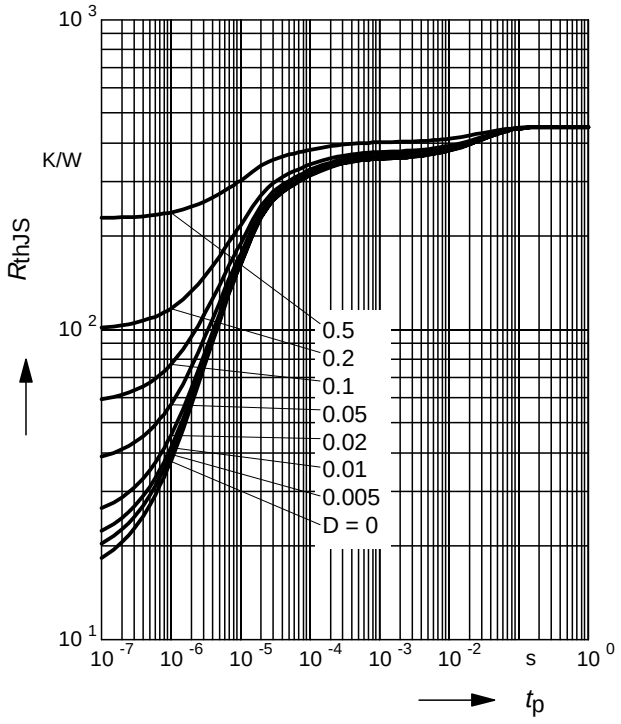
Parameter	Symbol	Values			Unit
		min.	typ.	max.	
DC characteristics					
Reverse current V_R = 40 V	I_R	-	-	10	µA
Forward voltage I_F = 2 mA	V_F	-	0.58	1	V
AC characteristics					
Diode capacitance V_R = 0 V, f = 1 MHz	C_T	-	0.35	0.6	pF
Case capacitance f = 1 MHz	C_C	-	0.1	-	
Differential resistance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

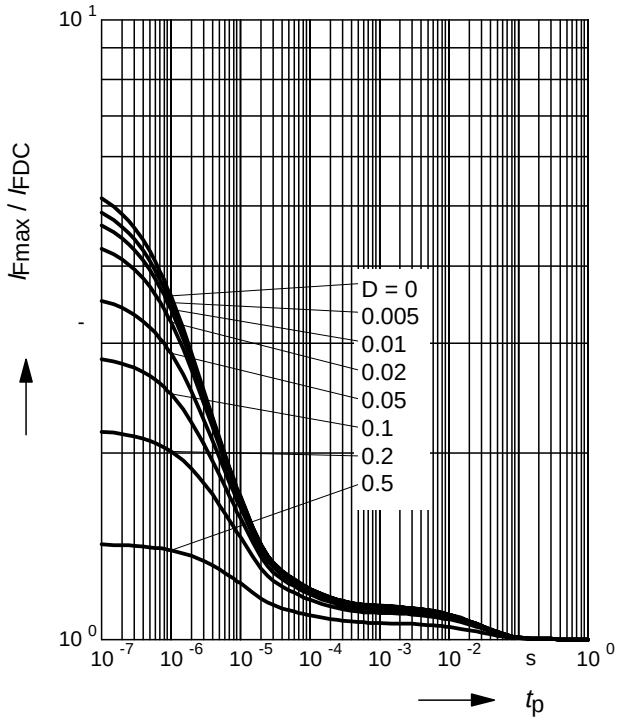


Permissible Pulse Load $R_{thJS} = f(t_p)$



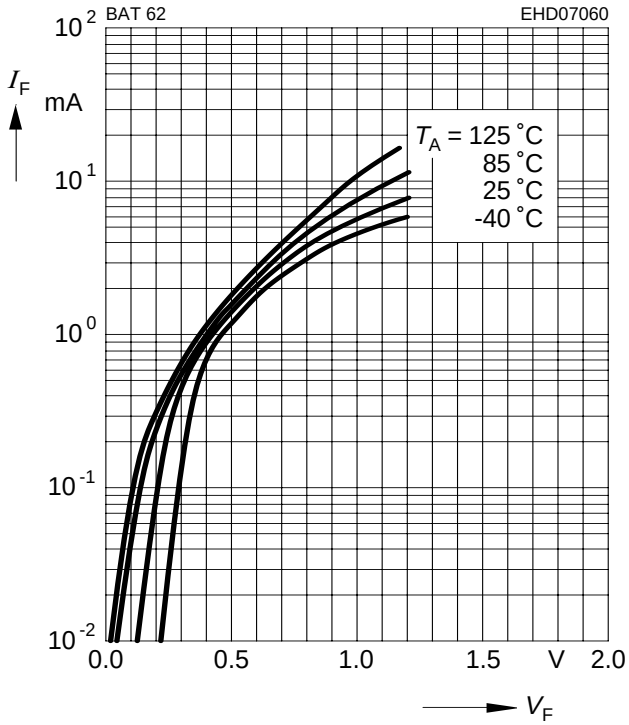
Permissible Pulse Load

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



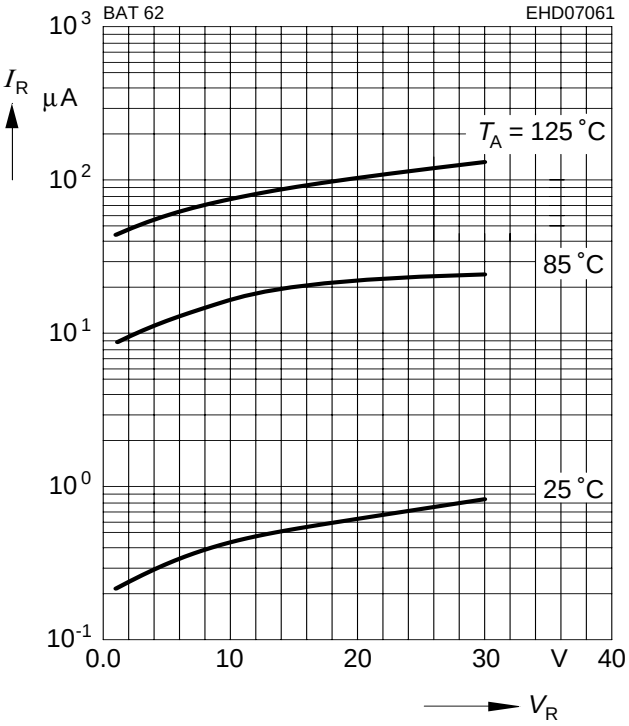
Forward current $I_F = f(V_F)$

T_A = Parameter



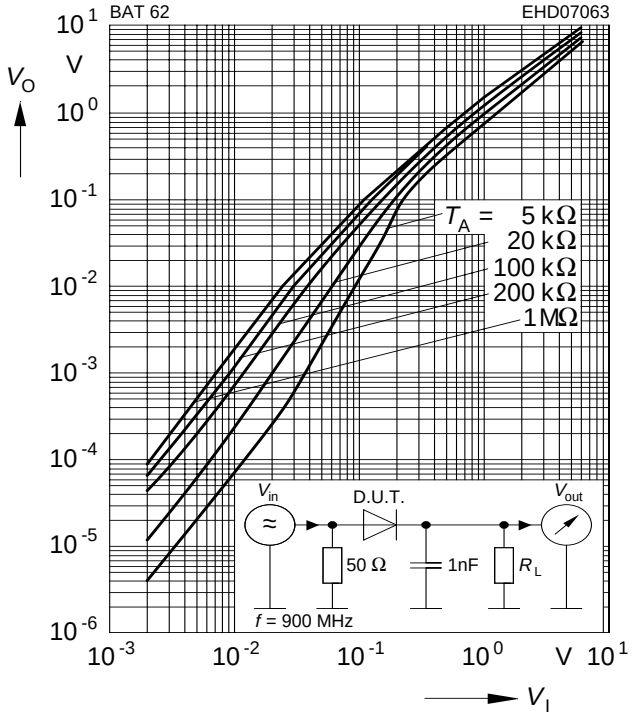
Reverse current $I_R = f(V_R)$

T_A = Parameter



Rectifier voltage $V_O = f(V_i)$

f = 900MHz



Diode capacitance $C_T = f(V_R)$

f = 1MHz