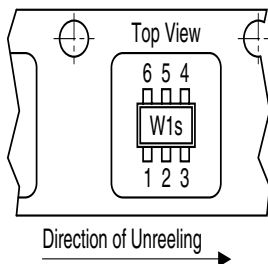


Silicon Schottky Diode Array

- General-purpose diode for high-speed switching
- Circuit protection
- Voltage clamping
- High-level detecting and mixing

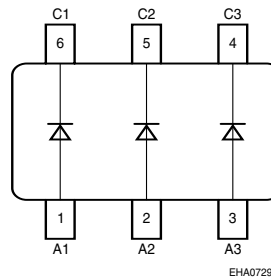
Tape loading orientation



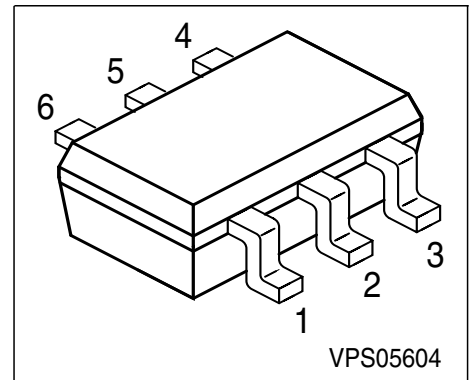
Marking on SOT-363 package
(for example W1s)
corresponds to pin 1 of device

Position in tape: pin 1
opposite of feed hole side

EHA07193



EHA07291



ESD: Electrostatic discharge sensitive device, observe handling precautions!

Type	Marking	Pin Configuration						Package
BAS 70-08S	78s	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	70	V
Forward current	I_F	70	mA
Surge forward current ($t < 10\text{ms}$)	I_{FSM}	100	
Total power dissipation, $T_S \leq 40^\circ\text{C}$	P_{tot}	250	mW
Junction temperature	T_j	150	$^\circ\text{C}$
Operating temperature range	T_{op}	-55 ... 150	
Storage temperature	T_{stg}	-55 ... 150	

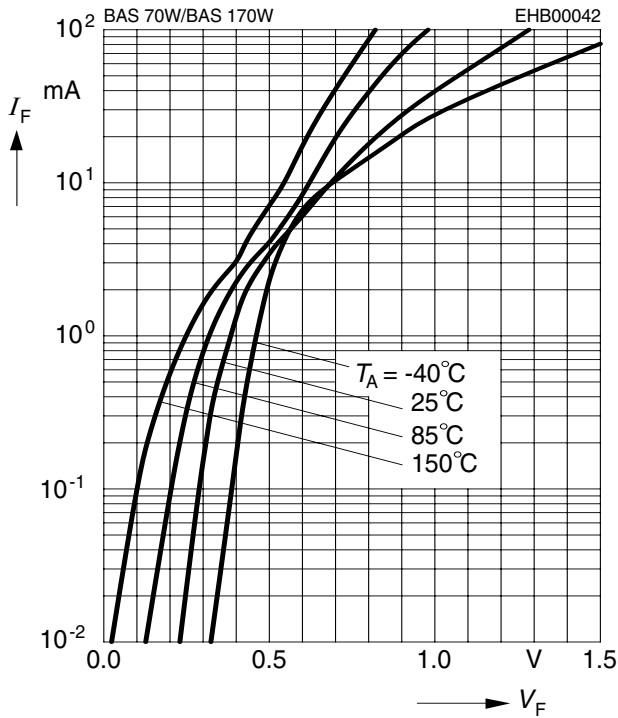
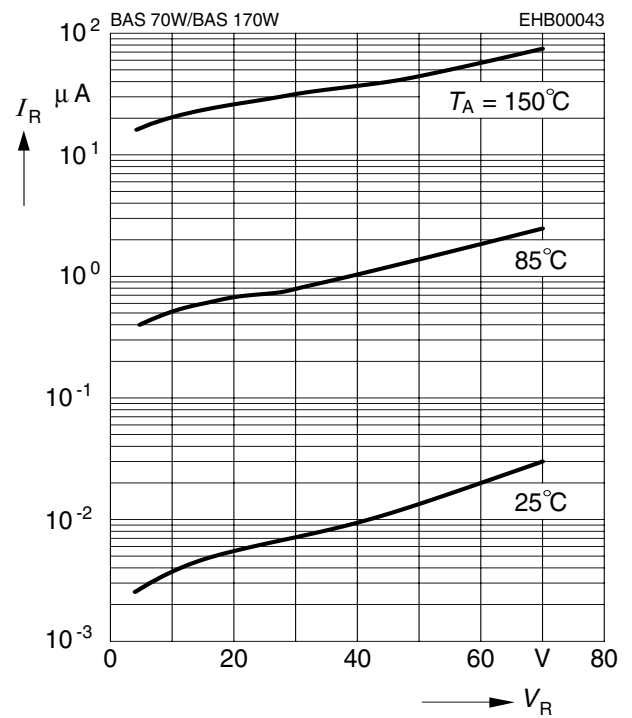
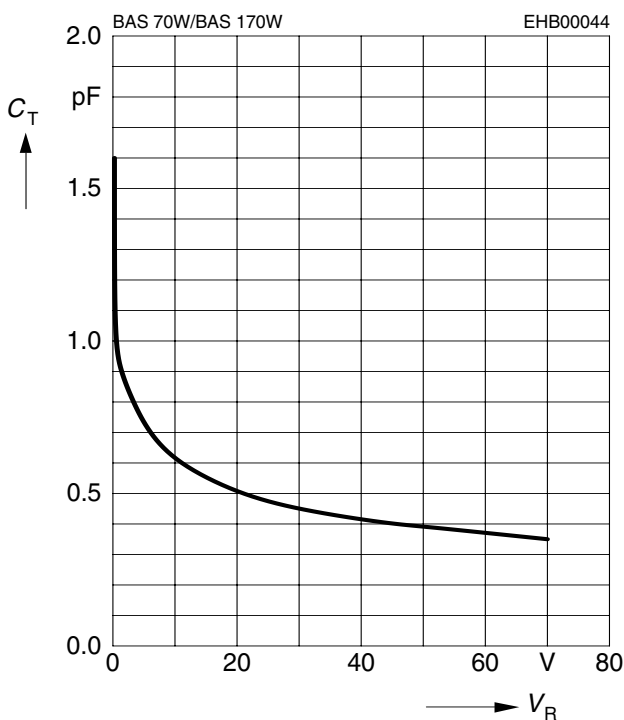
Thermal Resistance

Junction - ambient ¹⁾	R_{thJA}	≤ 575	K/W
Junction - soldering point	R_{thJS}	≤ 435	

1) Package mounted on epoxy pcb 40mm x 40mm x 1.5mm / 0.5cm² Cu

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

Parameter	Symbol	Values			Unit
		min.	typ.	max.	
DC characteristics					
Breakdown voltage $I_{(BR)} = 10 \mu A$	$V_{(BR)}$	70	-	-	V
Reverse current $V_R = 50 V$ $V_R = 70 V$	I_R	- -	- -	0.1 10	μA
Forward voltage $I_F = 1 mA$ $I_F = 10 mA$ $I_F = 15 mA$	V_F	- - -	375 705 880	410 750 1000	mV
AC characteristics					
Diode capacitance $V_R = 0 V, f = 1 MHz$	C_T	-	1.6	2	pF
Charge carrier life time $I_F = 25 mA$	τ	-	-	100	ps
Forward resistance $I_F = 10 mA, f = 100 MHz$	R_F	-	30	-	Ω

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

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

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

Differential forward resistance $r_f = f(I_F)$
 $f = 10 \text{ kHz}$
