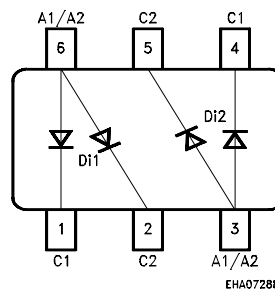
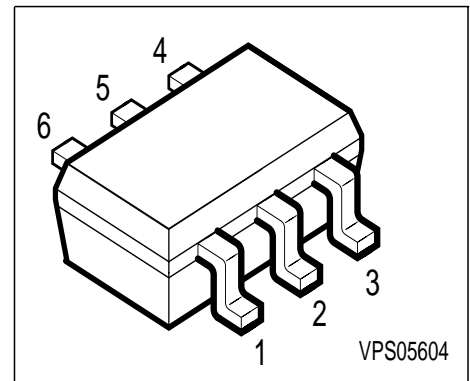


### Silicon Schottky Diode Array

- General-purpose diode for high-speed switching
- Circuit protection
- Voltage clamping
- High-level detecting and mixing
- Available with CECC quality assessment



Type	Marking	Ordering Code	Pin Configuration			Package
BAS 70-06S	76s	Q62702-A3469	1/4=C1	2/5=C2	3/6=A1/A2	SOT-363

#### Maximum Ratings

Parameter	Symbol	Value	Unit
Diode reverse voltage	$V_R$	70	V
Forward current	$I_F$	70	mA
Surge forward current ( $t < 100\mu s$ )	$I_{FSM}$	100	
Total power dissipation, $T_S \leq 72\text{ }^\circ\text{C}$	$P_{tot}$	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 <sup>1)</sup>	$R_{thJA}$	$\leq 545$	K/W
Junction - soldering point	$R_{thJS}$	$\leq 310$	

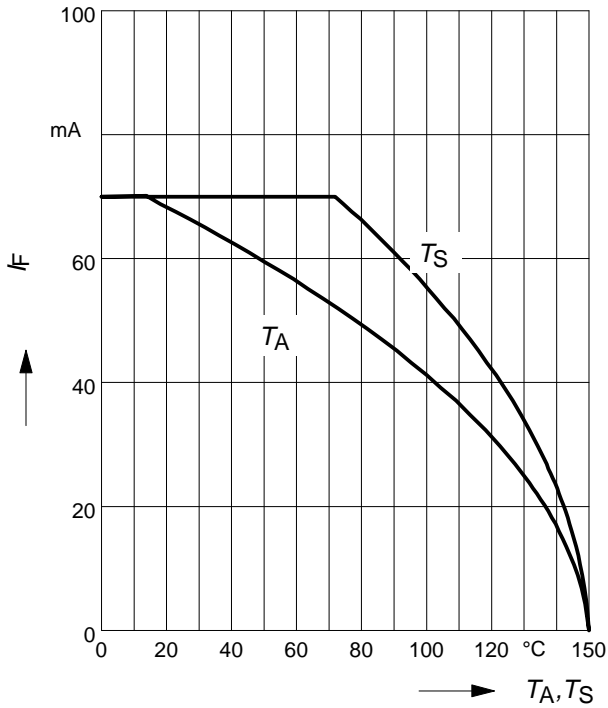
1) Package mounted on epoxy pcb 40mm x 40mm x 1.5mm / 0.5cm<sup>2</sup> Cu

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

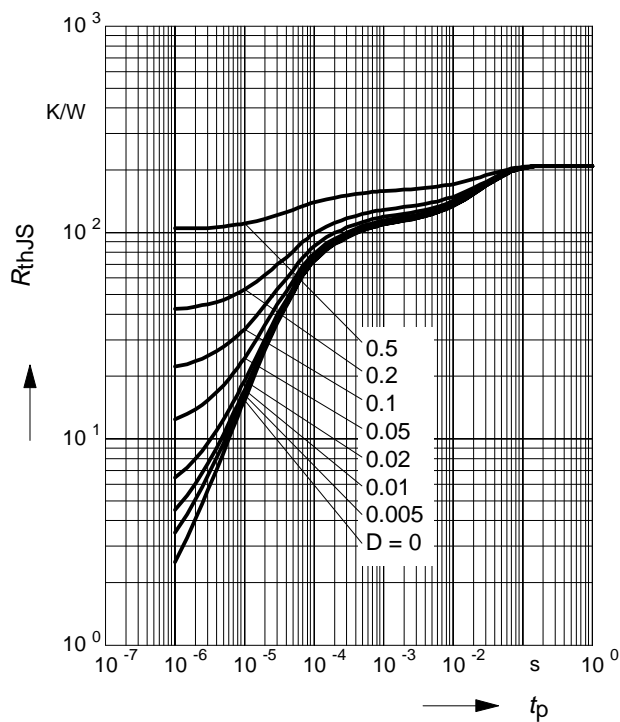
Parameter	Symbol	Values			Unit
		min.	typ.	max.	
<b>DC characteristics</b>					
Breakdown voltage $I_{(BR)} = 10 \mu\text{A}$	$V_{(BR)}$	70	-	-	V
Reverse current $V_R = 50 \text{ V}$ $V_R = 70 \text{ V}$	$I_R$	- -	- -	0.1 10	$\mu\text{A}$
Forward voltage $I_F = 1 \text{ mA}$ $I_F = 10 \text{ mA}$ $I_F = 15 \text{ mA}$	$V_F$	300 600 750	375 705 880	410 750 1000	mV
<b>AC characteristics</b>					
Diode capacitance $V_R = 0 \text{ V}, f = 1 \text{ MHz}$	$C_T$	-	1.6	2	pF
Charge carrier life time $I_F = 25 \text{ mA}$	$\tau$	-	-	100	ps
Differential forward resistance $I_F = 10 \text{ mA}, f = 100 \text{ MHz}$	$r_f$	-	30	-	$\Omega$

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

\* Package mounted on epoxy

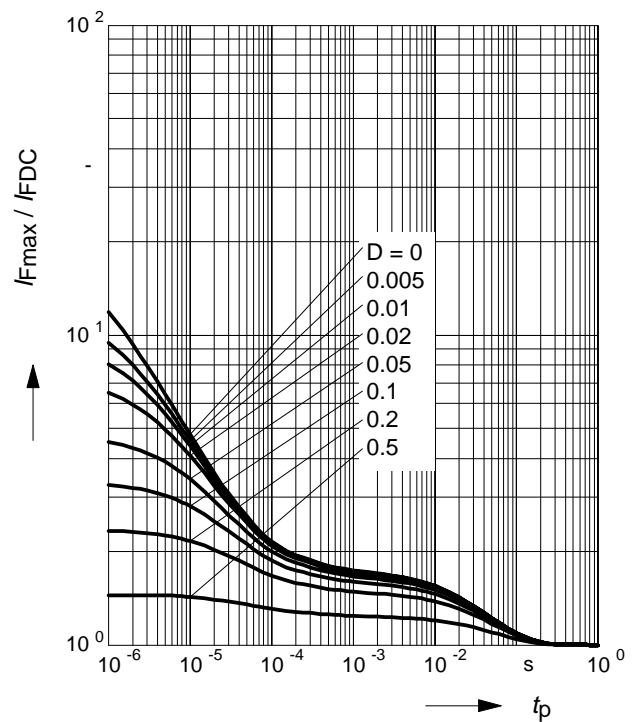


Permissible Pulse Load  $R_{thJS} = f(t_p)$



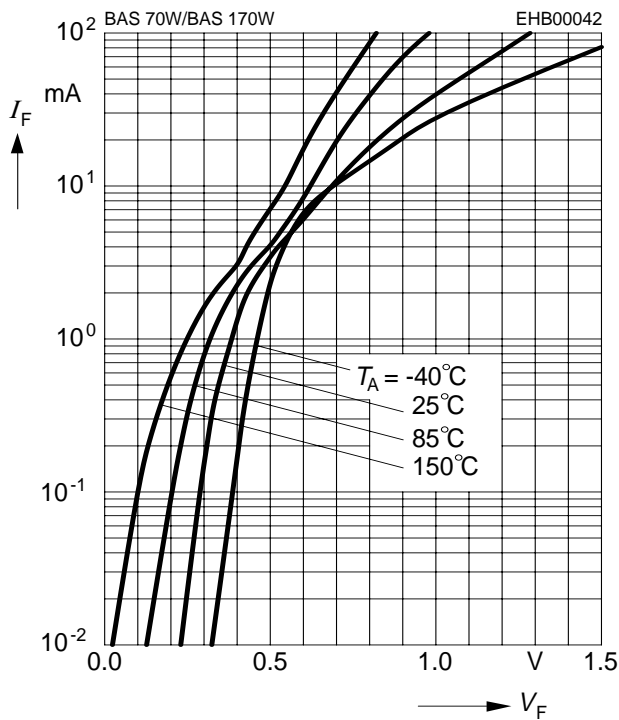
Permissible Pulse Load

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



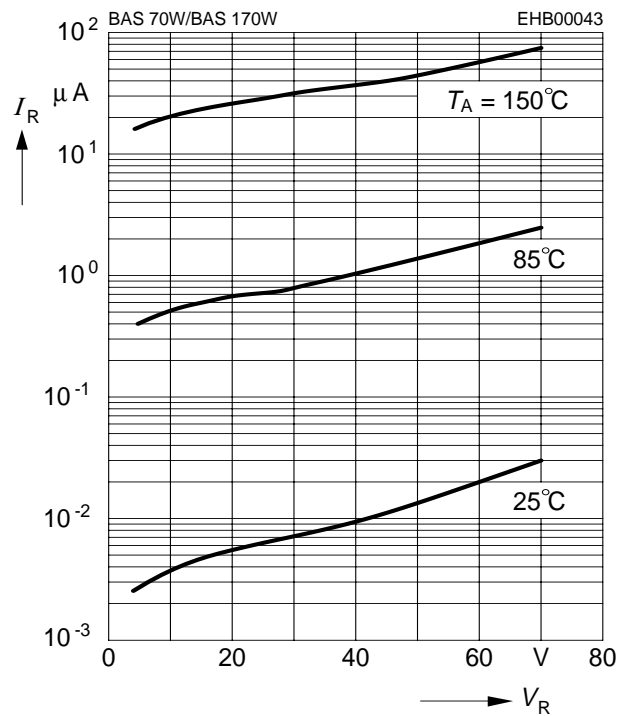
### Forward current $I_F = f(V_F)$

$T_A =$  Parameter



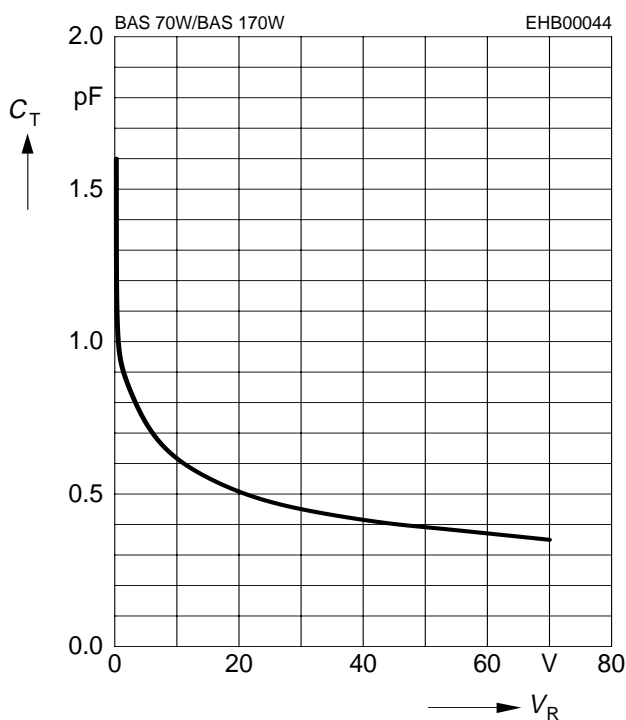
### Reverse current $I_R = f(V_R)$

$T_A =$  Parameter



### Diode capacitance $C_T = f(V_R)$

$f = 1\text{MHz}$



### Differential forward resistance $r_f = f(I_F)$

$f = 10\text{kHz}$

