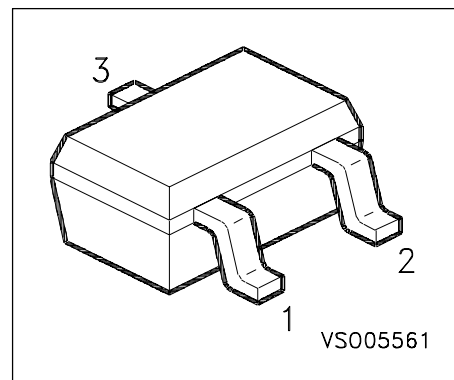


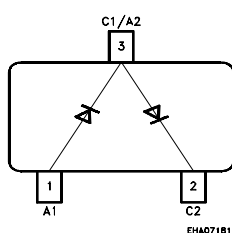
Silicon Schottky Diodes

Preliminary data

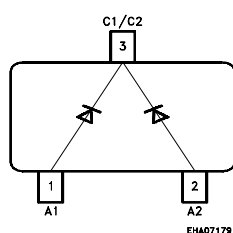
- For mixer applications in the VHF/UHF range
- For high-speed switching



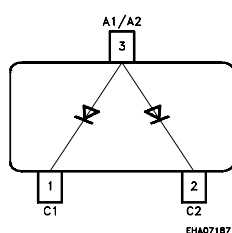
BAT 17-04W



BAT 17-05W



BAT 17-06W



Type	Marking	Ordering Code	Pin Configuration			Package
BAT 17-04W	54	Q62702-	1 = A	2 = C	3 = C/A	SOT-323
BAT 17-05W	55	Q62702-	1 = A	2 = A	3 = C/C	SOT-323
BAT 17-06W	56	Q62702-	1 = C	2 = C	3 = A/A	SOT-323
BAT 17W	53	Q62702-	1 = A	2 = -	3 = C	SOT-323

Maximum Ratings

Parameter	Symbol	Values	Unit
Diode reverse voltage	V_R	4	V
Forward current	I_F	130	mA
Total power dissipation, BAT17W $T_A \leq 97^\circ\text{C}$	P_{tot}	150	mW
Total power dissipation, BAT17-04...06W $T_S \leq 92^\circ\text{C}$	P_{tot}	150	
Junction temperature	T_j	150	$^\circ\text{C}$
Operating temperature range	T_{op}	- 55 ... + 150	
Storage temperature	T_{stg}	- 55 ... + 150	

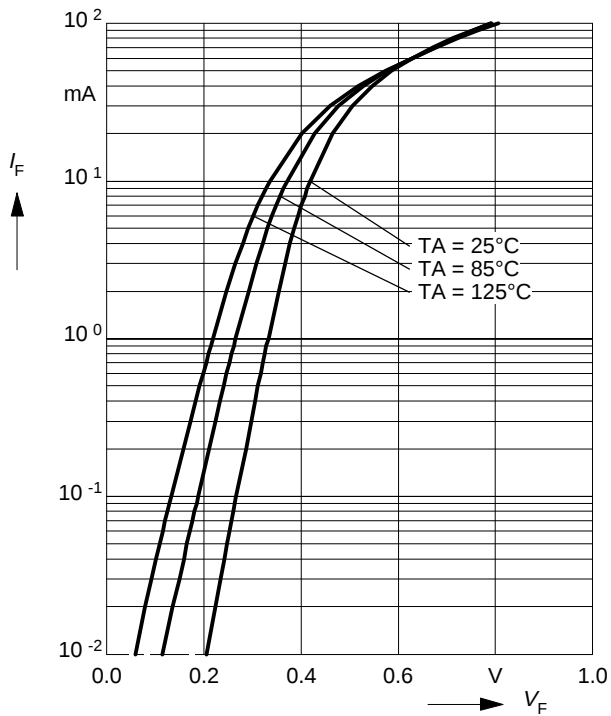
Thermal Resistance

Junction - ambient, BAT17W	R_{thJA}	≤ 435	K/W
Junction - ambient, BAT17-04W...06W	R_{thJA}	≤ 550	
Junction - soldering poin, BAT17W	R_{thJS}	≤ 355	
Junction - soldering point, BAT17-04W...06W	R_{thJS}	≤ 390	

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

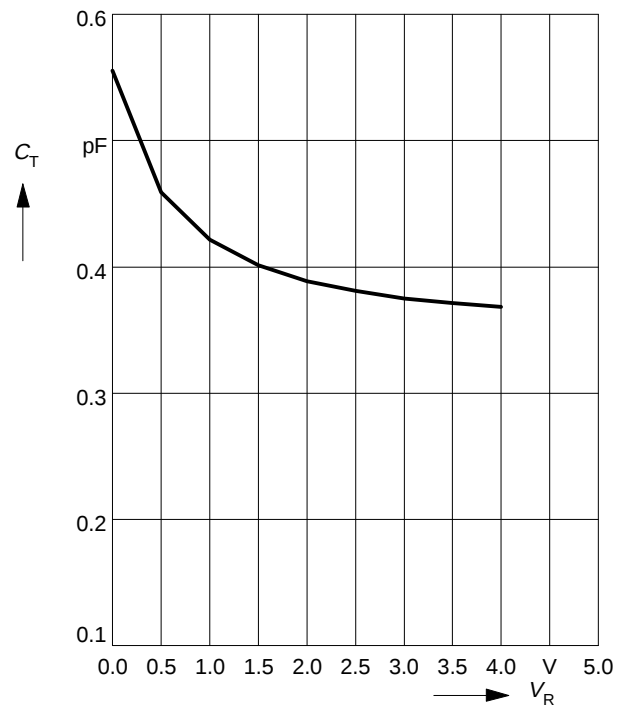
Parameter	Symbol	Values			Unit
		min.	typ.	max.	
DC characteristics					
Breakdown voltage $I_{(BR)} = 100\ \mu\text{A}$	$V_{(BR)}$	4	-	-	V
Reverse current $V_R = 3\ \text{V}, T_A = 25\ ^\circ\text{C}$ $V_R = 3\ \text{V}, T_A = 60\ ^\circ\text{C}$ $V_R = 4\ \text{V}, T_A = 25\ ^\circ\text{C}$	I_R	- - -	- - -	0.25 1.25 10	μA
Forward voltage $I_F = 0.1\ \text{mA}$ $I_F = 1\ \text{mA}$ $I_F = 10\ \text{mA}$	V_F	200 250 350	275 340 425	350 450 600	mV
Diode capacitance $V_R = 1\ \text{V}, f = 1\ \text{MHz}$	C_T	0.4	0.55	0.75	pF
Differential forward resistance $I_F\ 10\text{mA}/\ 5\ \text{mA}$	R_F	-	8	15	Ω

Forward current $I_F = f(V_F)$



Diode capacitance $C_T = f(V_R)$

$f = 1\text{MHz}$



Leakage current $I_R = f(V_R)$

$T_A = \text{Parameter}$

