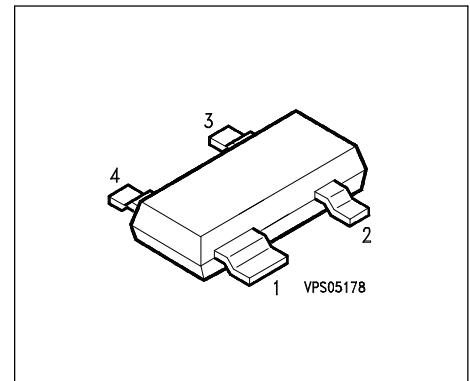


Silicon Schottky Diodes

- Zero bias diode array for mixer and detectors up to GHz frequencies
- Crossover ring quad



Type	Marking	Ordering Code	Pin Configuration			Package
BAT 63-099R	RSN	Q62702-A1105	1 = A	2 = C		SOT-143

Maximum Ratings

Parameter	Symbol	Values	Unit
Diode reverse voltage	V_R	40	V
Forward current	I_F	40	mA
Total power dissipation, BAT17W $T_A \leq 97^\circ\text{C}$	P_{tot}		mW
Total power dissipation, BAT17-04...06W $T_S \leq 92^\circ\text{C}$	P_{tot}		
Junction temperature	T_j	150	°C
Operating temperature range	T_{op}		
Storage temperature	T_{stg}	- 55 ... + 150	

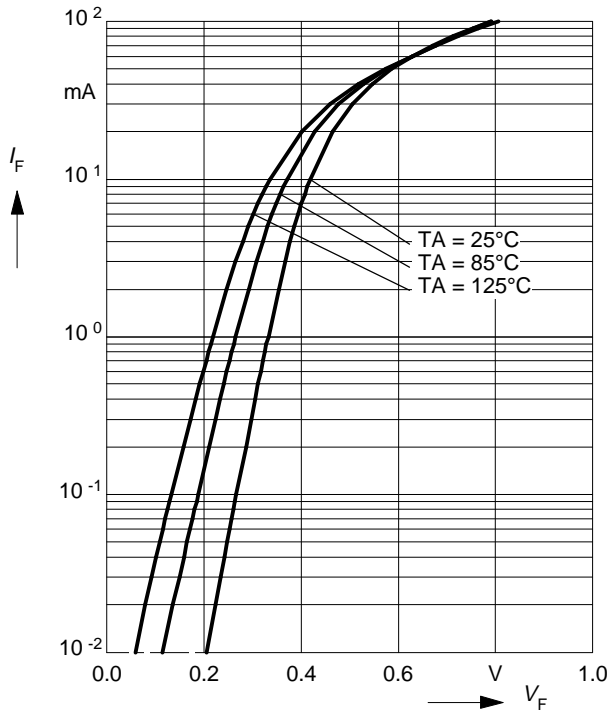
Thermal Resistance

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

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

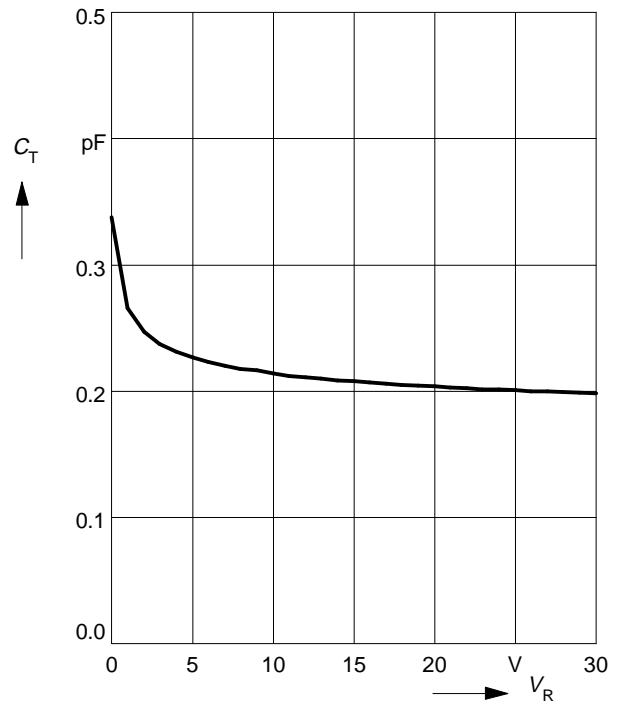
Parameter	Symbol	Values			Unit
		min.	typ.	max.	
DC characteristics					
Breakdown voltage $I_{(BR)} = 100 \mu\text{A}$	$V_{(BR)}$				V
Reverse current $V_R = 40 \text{ V}, T_A = 25 \text{ }^\circ\text{C}$	I_R	-	-	10	μA
Forward voltage $I_F = 2 \text{ mA}$	V_F	-	0.85	1	V
Diode capacitance $V_R = 0, f = 1 \text{ MHz}$	C_T	-	0.35	0.6	pF
Differential forward resistance $I_F = 5 \text{ mA}, f = 100 \text{ MHz}$	R_F				OHM

Forward current $I_F = f(V_F)$



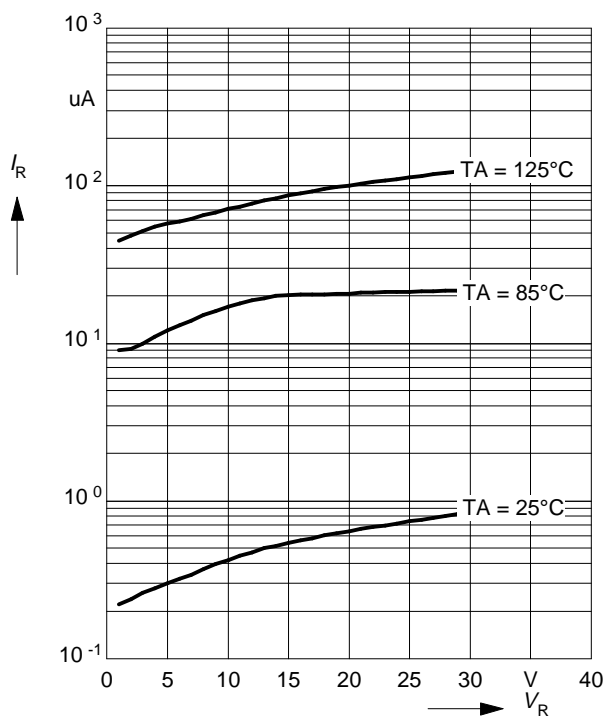
Diode capacitance $C_T = f(V_R)$

$f = 1\text{MHz}$



Leakage current $I_R = f(V_R)$

$T_A = \text{Parameter}$



Package

