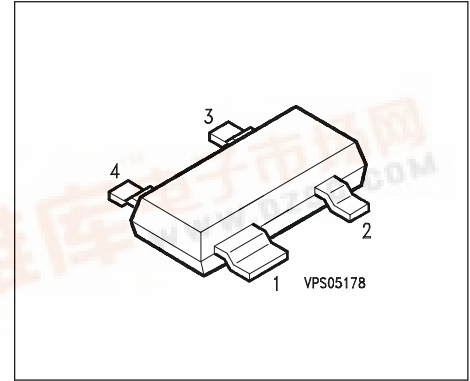


# SIEMENS

## BAT 63-099R

### 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	$^\circ\text{C}$
Operating temperature range	$T_{op}$		
Storage temperature	$T_{stg}$	- 55 ... + 150	

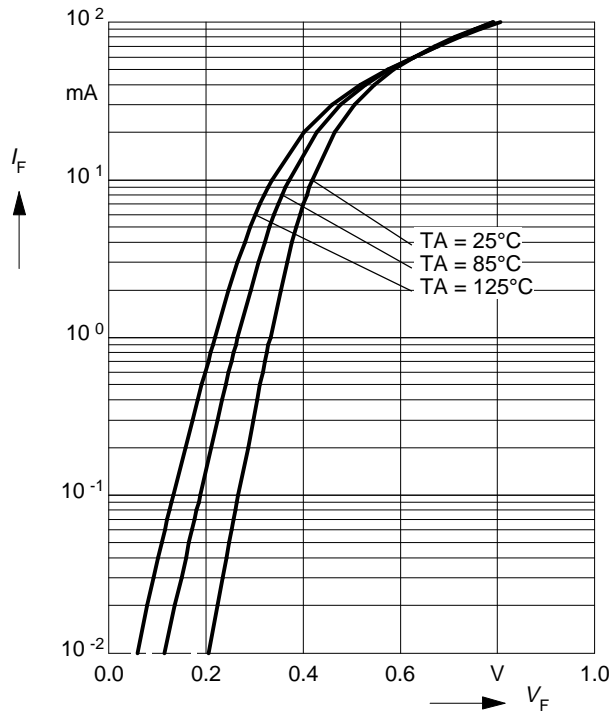
### Thermal Resistance

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**

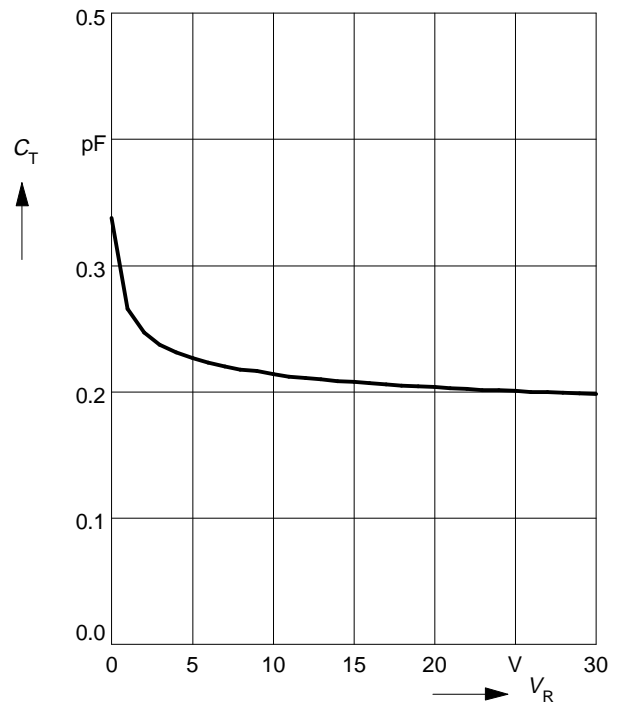
Parameter	Symbol	Values			Unit
		min.	typ.	max.	
<b>DC characteristics</b>					
Breakdown voltage $I_{(BR)} = 100 \mu\text{A}$	$V_{(BR)}$				V
Reverse current $V_R = 40 \text{ V}, T_A = 25 \text{ }^\circ\text{C}$	$I_R$	-	-	10	$\mu\text{A}$
Forward voltage $I_F = 2 \text{ mA}$	$V_F$	-	0.85	1	V
Diode capacitance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

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



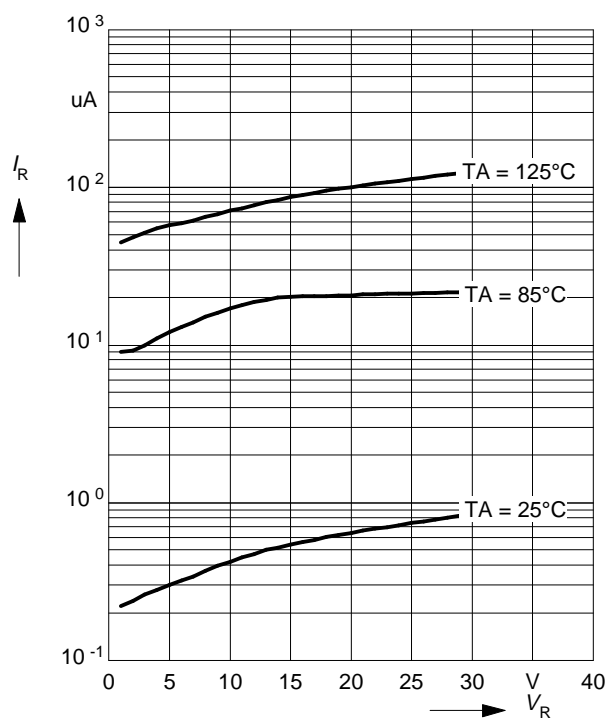
**Diode capacitance  $C_T = f(V_R)$**

$f = 1\text{MHz}$



**Leakage current  $I_R = f(V_R)$**

$T_A = \text{Parameter}$



### Package

