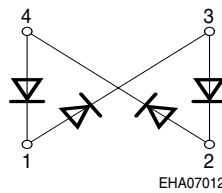
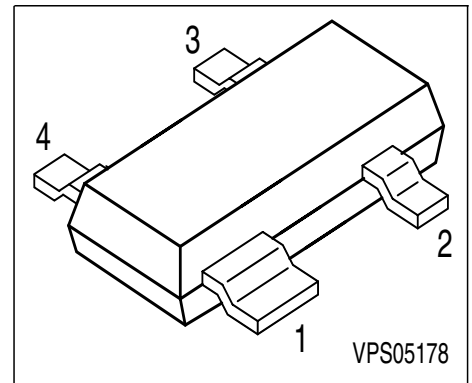


Silicon Crossover Ring Quad Schottky Diode

- Low barrier diode for double balance mixers, phase detectors and modulators



ESD: Electrostatic discharge sensitive device, observe handling precaution!

Type	Marking	Pin Configuration				Package
BAT 15-099R	S6s	1=A1/C4	2=C2/A3	3=C1/A2	4=C3/A4	SOT-143

Maximum Ratings (per Diode)

Parameter	Symbol	Value	Unit
Forward current	I_F	110	mA
Total power dissipation, $T_S \leq 70\text{ °C}$	P_{tot}	100	mW
Operating temperature range	T_{op}	-55 ... 150	°C
Storage temperature	T_{stg}	-55 ... 150	°C

Thermal Resistance (per Diode)

Junction - ambient ¹⁾	R_{thJA}	≤ 1020	K/W
Junction - soldering point	R_{thJS}	≤ 780	

1) Package mounted on alumina 15mm x 16.7mm x 0.7mm

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

Parameter	Symbol	Values			Unit
		min.	typ.	max.	
DC characteristics (per Diode)					
Forward voltage $I_F = 1\text{ mA}$ $I_F = 10\text{ mA}$	V_F	-	0.23 0.32	0.32 0.41	V
Forward voltage matching ¹⁾ $I_F = 10\text{ mA}$	ΔV_F	-	-	20	mV

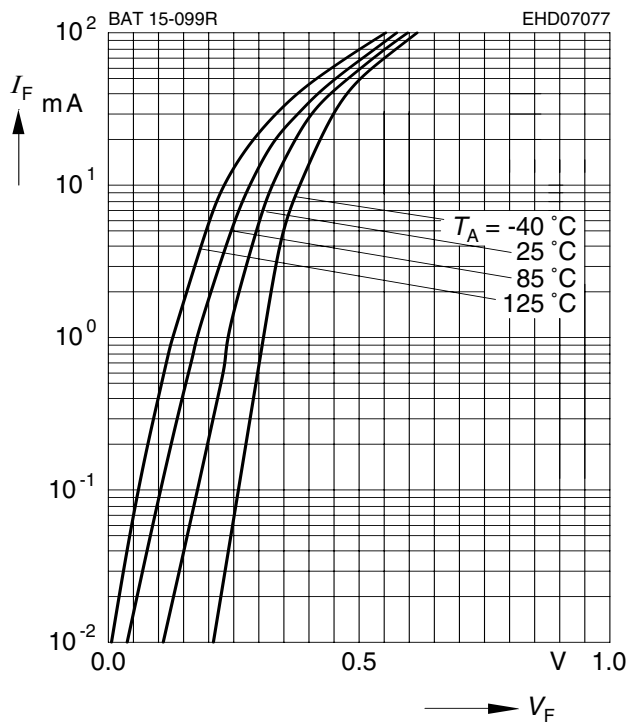
AC characteristics (per Diode)

Diode capacitance $V_R = 0\text{ V}$, $f = 1\text{ MHz}$	C_T	-	0.38	0.5	pF
Forward resistance $I_F = 10\text{ mA} / 50\text{ mA}$	R_F	-	5.5	-	Ω

1) ΔV_F is the difference between the lowest and the highest V_F in the component.

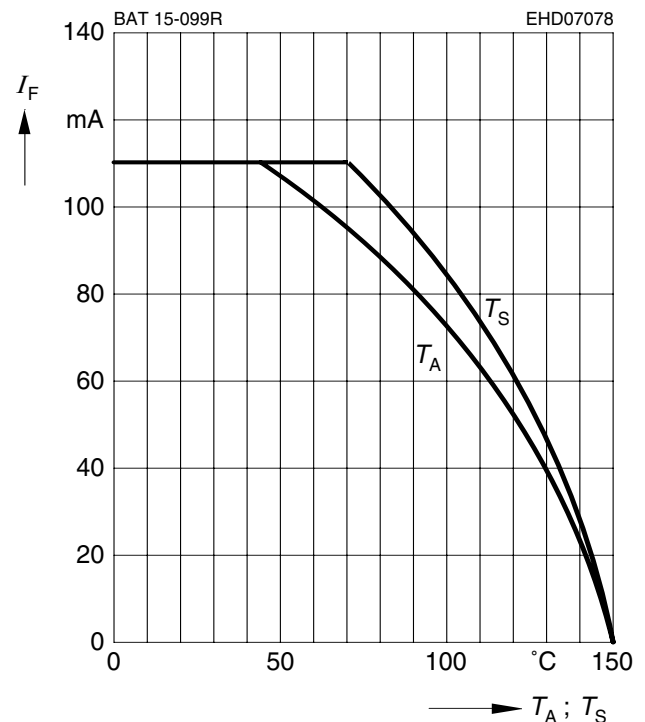
Forward current $I_F = f(V_F)$

$T_A =$ Parameter



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

* Package mounted on alumina





LittleDiode supplies new, hard to find or obsolete electronic components and semiconductors all over the world.

With over two million different components listed you are sure to find the part you need.

Feel free to visit us today at our online store:

LittleDiode.com

Looking forward to providing you with the best possible service.