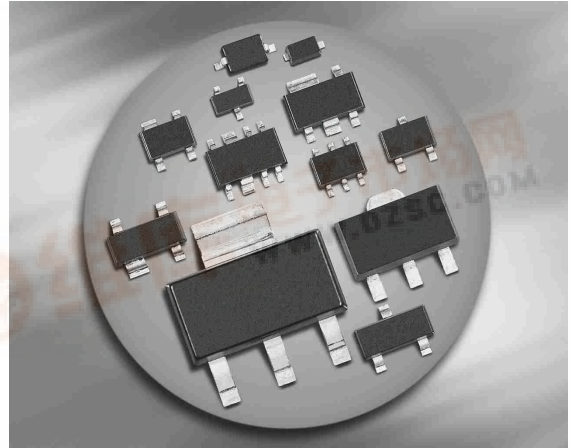




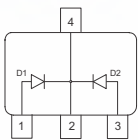
BAT66...

Silicon Schottky Diode

- Power rectifier diode
- For low-loss, fast-recovery rectification, meter protection, bias isolation and clamping purpose



BAT66-05



ESD: Electrostatic discharge sensitive device, observe handling precaution!

Type	Package	Configuration	Marking
BAT66-05	SOT223	common cathode	BAT66-05

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

Parameter	Symbol	Value	Unit
Diode reverse voltage	V_R	30	V
Forward current	I_F	2	A
Surge forward current, ($t \leq 10\text{ms}$)	I_{FSM}	10	
Average forward current (50/60Hz, sinus)	I_{FAV}	1	
Total power dissipation $T_S \leq 126^\circ\text{C}$	P_{tot}	1.2	W
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 ... 150	

Thermal Resistance

Parameter	Symbol	Value	Unit
Junction - soldering point ¹⁾	R_{thJS}	≤ 20	K/W

¹⁾For calculation of R_{thJA} please refer to Application Note Thermal Resistance

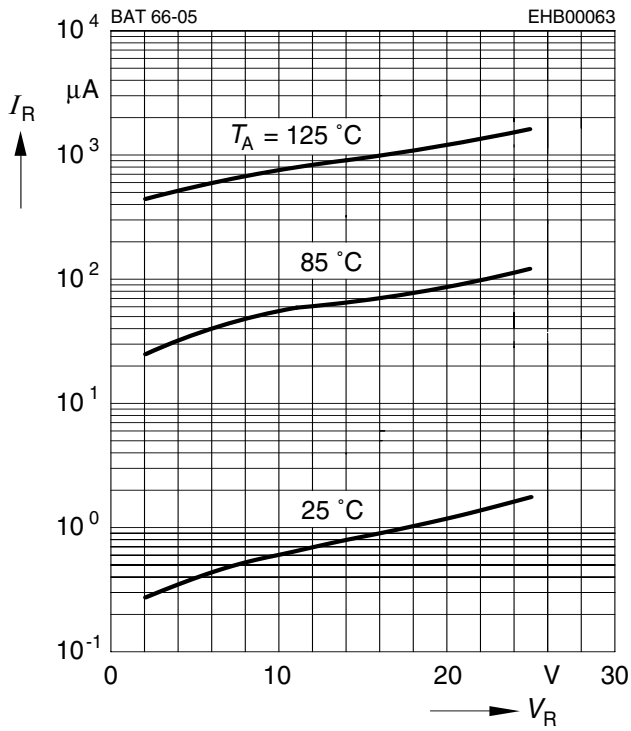


Electrical Characteristics at $T_A = 25^\circ\text{C}$, unless otherwise specified

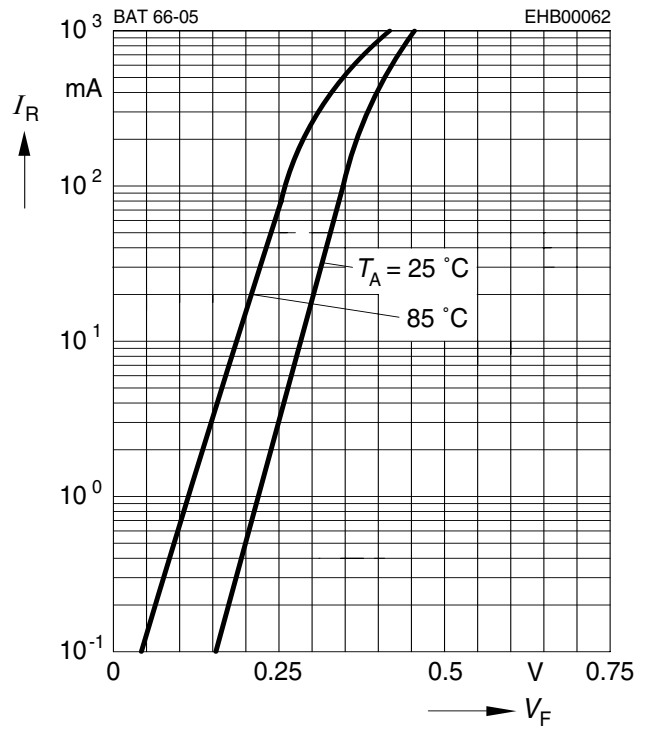
Parameter	Symbol	Values			Unit
		min.	typ.	max.	
DC Characteristics					
Reverse current	I_R				μA
$V_R = 25\text{ V}$		-	-	10	
$V_R = 25\text{ V}, T_A = 85^\circ\text{C}$		-	-	1000	
Forward voltage	V_F				V
$I_F = 10\text{ mA}$		-	0.28	0.35	
$I_F = 100\text{ mA}$		-	0.35	-	
$I_F = 1\text{ A}$		-	0.47	0.6	
AC Characteristics					
Diode capacitance	C_T	-	30	40	pF
$V_R = 10\text{ V}, f = 1\text{ MHz}$					

Reverse current $I_R = f(V_R)$

$T_A =$ Parameter



Forward current $I_F = f(V_F)$



Forward current $I_F = f(T_S)$

