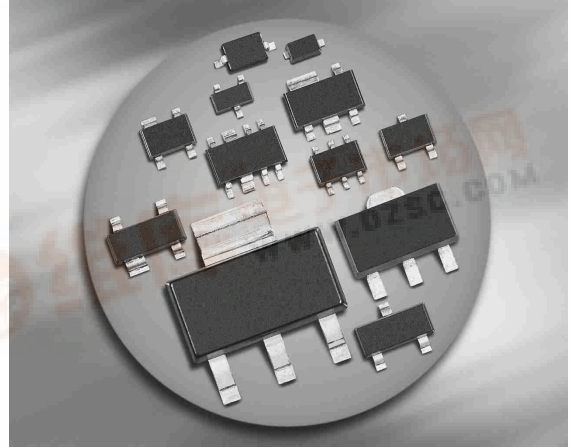


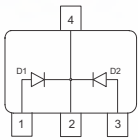


**Silicon Schottky Diode**

- 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 <sup>1)</sup>	$R_{thJS}$	$\leq 20$	K/W

<sup>1)</sup>For calculation of  $R_{thJA}$  please refer to Application Note Thermal Resistance

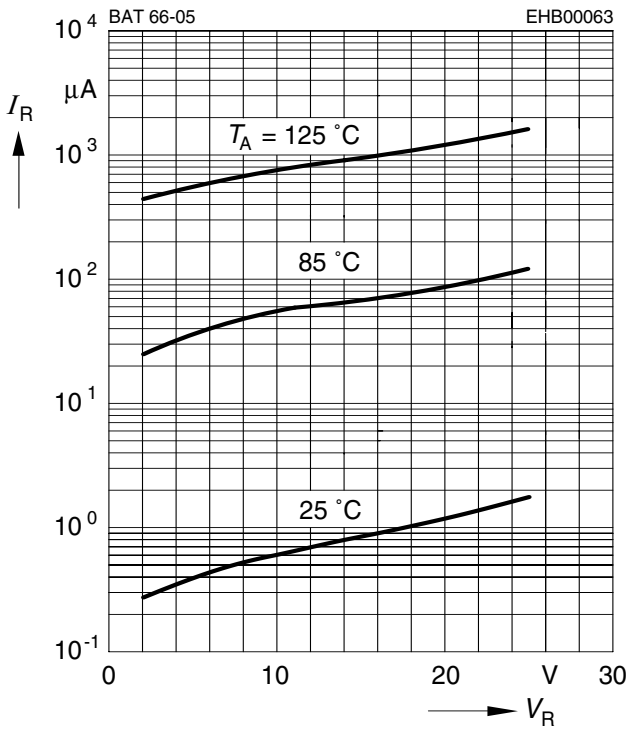


**Electrical Characteristics** at  $T_A = 25^\circ\text{C}$ , unless otherwise specified

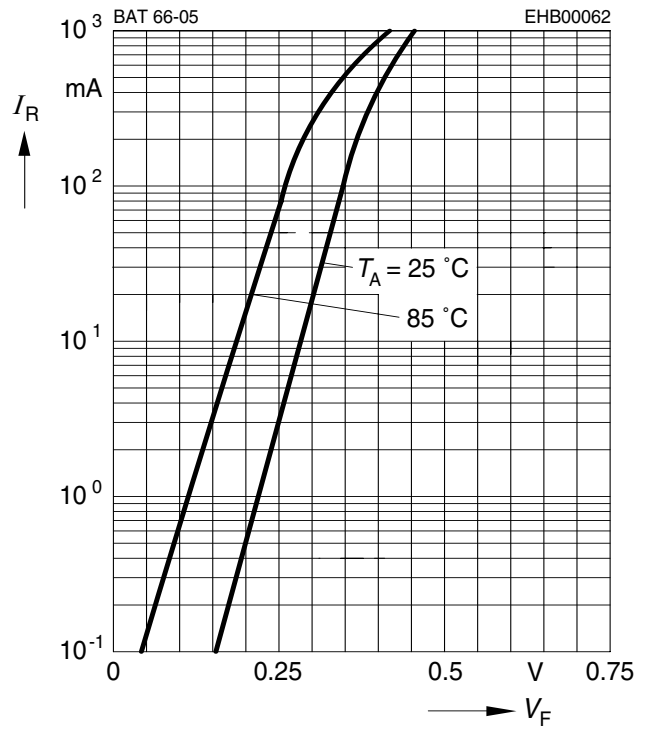
Parameter	Symbol	Values			Unit
		min.	typ.	max.	
<b>DC Characteristics</b>					
Reverse current	$I_R$				$\mu\text{A}$
$V_R = 25\text{ V}$		-	-	10	
$V_R = 25\text{ V}, T_A = 85^\circ\text{C}$		-	-	1000	
Forward voltage	$V_F$				V
$I_F = 10\text{ mA}$		-	0.28	0.35	
$I_F = 100\text{ mA}$		-	0.35	-	
$I_F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

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

$T_A =$  Parameter



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



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

