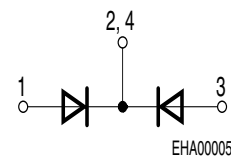
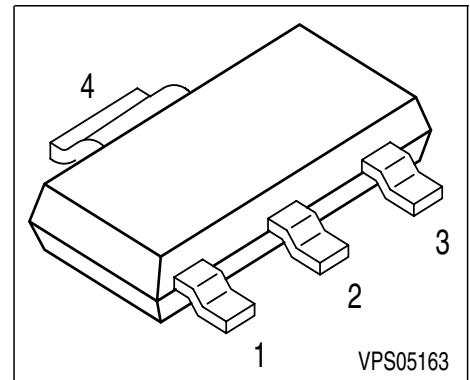


Silicon Schottky Diode

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



Type	Marking	Pin Configuration				Package
BAT 66-05	BAT 66-05	1 = A1	2=C1/C2	3 = A2	4=C1/C2	SOT-223

Maximum Ratings

Parameter	Symbol	Value	Unit
Diode reverse voltage	V_R	40	V
Forward current	I_F	2	A
Average forward current (50/60Hz, sinus)	I_{FAV}	1	
Surge forward current, $t \leq 10\text{ms}$	I_{FSM}	10	
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	

Maximum Ratings

Junction - ambient ¹⁾	R_{thJA}	≤ 160	K/W
Junction - soldering point	R_{thJS}	≤ 20	

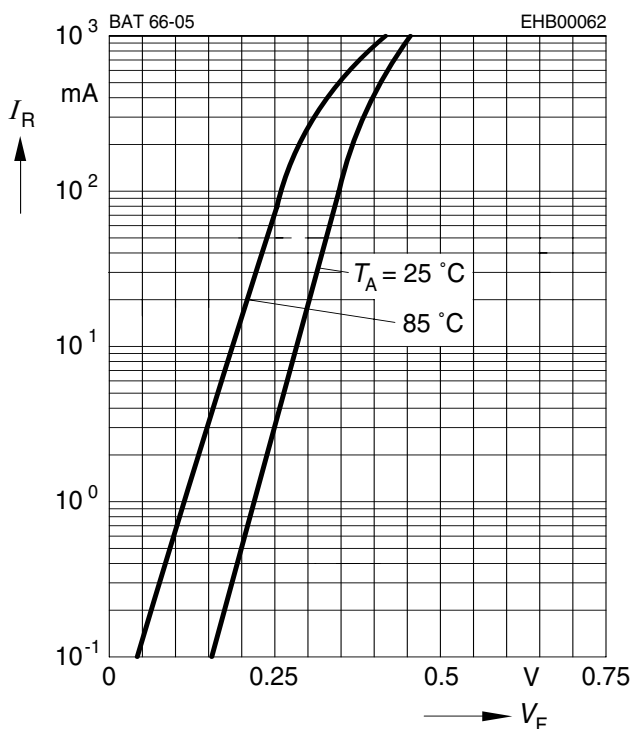
1) Package mounted on epoxy pcb 40mm x 40mm x 1.5mm / 6cm² Cu

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

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

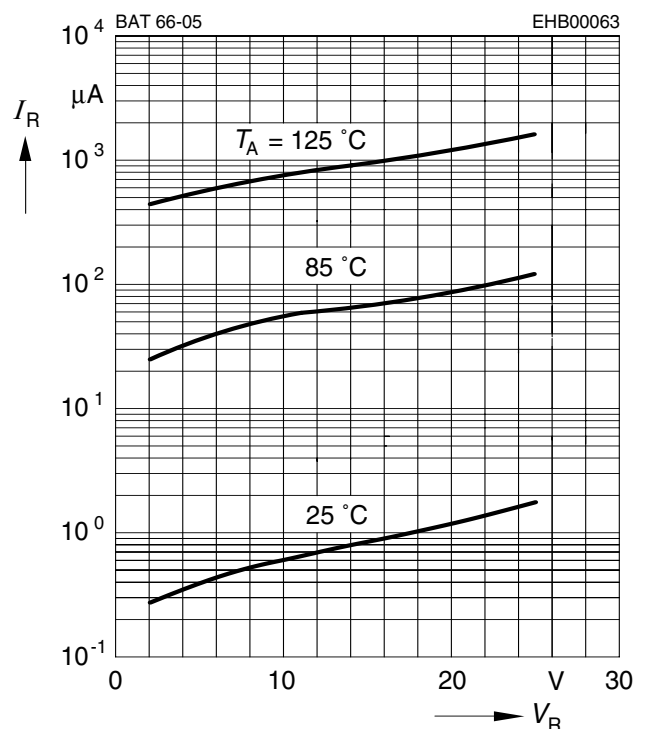
Forward current $I_F = f(V_F)$

$T_A = \text{Parameter}$



Reverse current $I_R = f(V_R)$

$T_A = \text{Parameter}$



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

* Package mounted on epoxy

