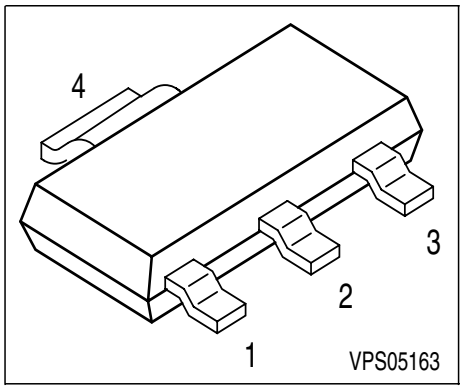
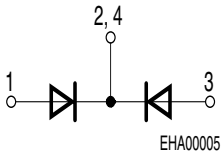
Silicon Schottky Diode

- 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, $t \leq 10$ms	I_{FSM}	10	
Total power dissipation, $T_S \leq 126$ °C	P_{tot}	1.2	W
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	-55 ... 150	

Maximum Ratings

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

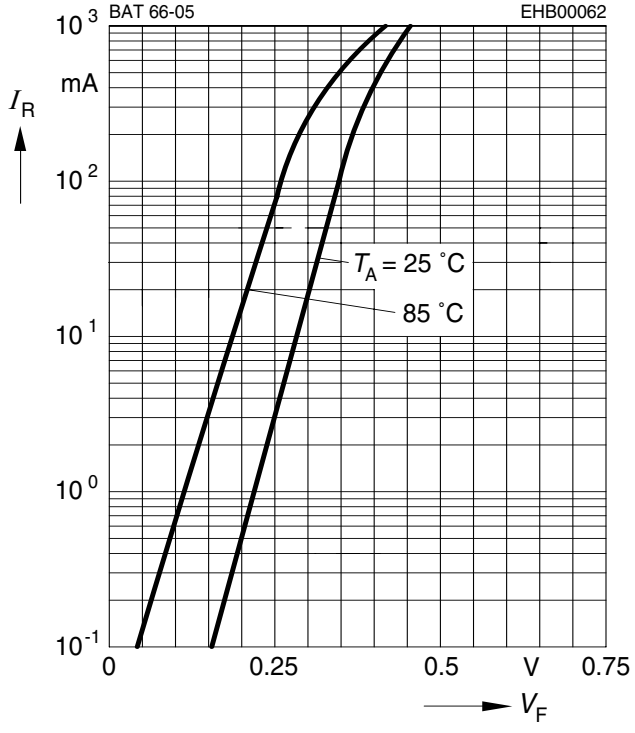
1) Package mounted on epoxy pcb 40mm x 40mm x 1.5mm / 6cm^2 Cu

Electrical Characteristics at T_A = 25°C, unless otherwise specified.

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

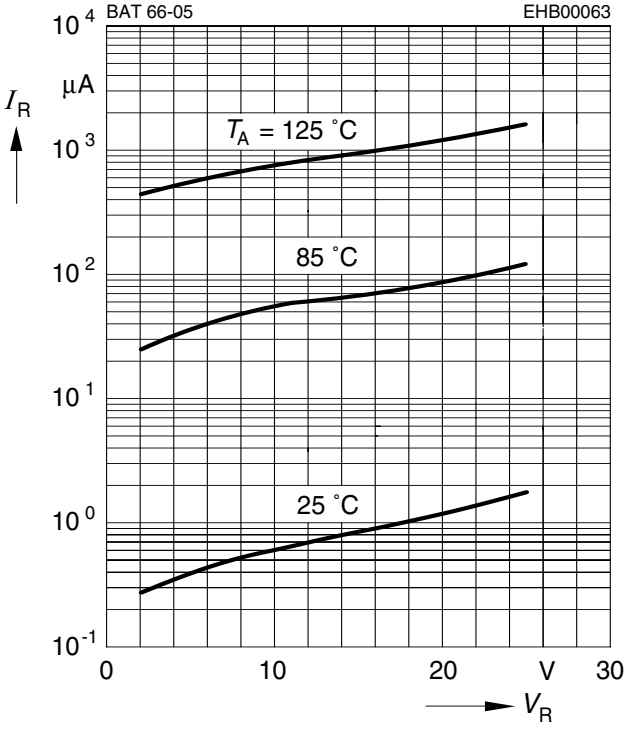
Forward current $I_F = f(V_F)$

T_A = Parameter



Reverse current $I_R = f(V_R)$

T_A = Parameter



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

* Package mounted on epoxy