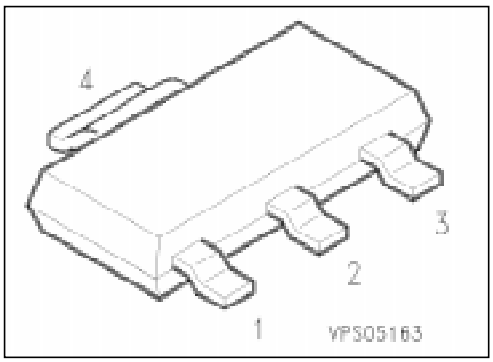
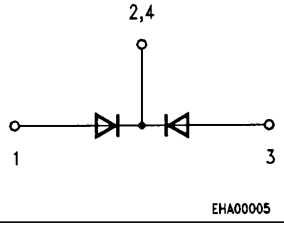
SIEMENS

Silicon Schottky Diode — BAT 66-05

Preliminary Data



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

Type	Marking	Ordering Code (tape and reel)	Pin Configuration	Package[1)]
BAT 66-05	BAT 66-05	Q62702-A988		SOT-223

Maximum Ratings

Parameter	Symbol	Values	Unit
Reverse voltage	V_R	40	V
Forward current	I_F	2	A
Average forward current, 50 Hz	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 range	T_{stg}	– 55 … + 150	

Thermal Resistance

Junction - ambient[2)]	$R_{th\ JA}$	≤ 160	K/W
Junction - soldering point	$R_{th\ JS}$	≤ 20	

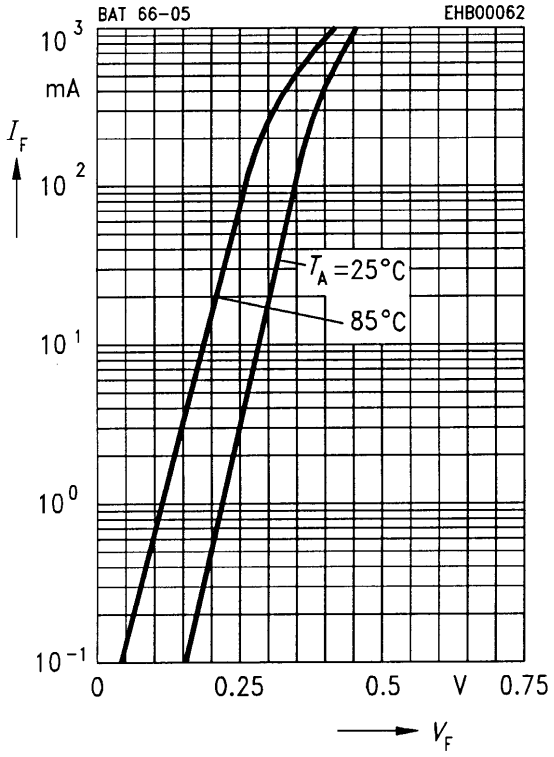
1) For detailed information see chapter Package Outlines.

2) Package mounted on epoxy pcb 40 mm × 40 mm × 1.5 mm/6 cm² Cu.

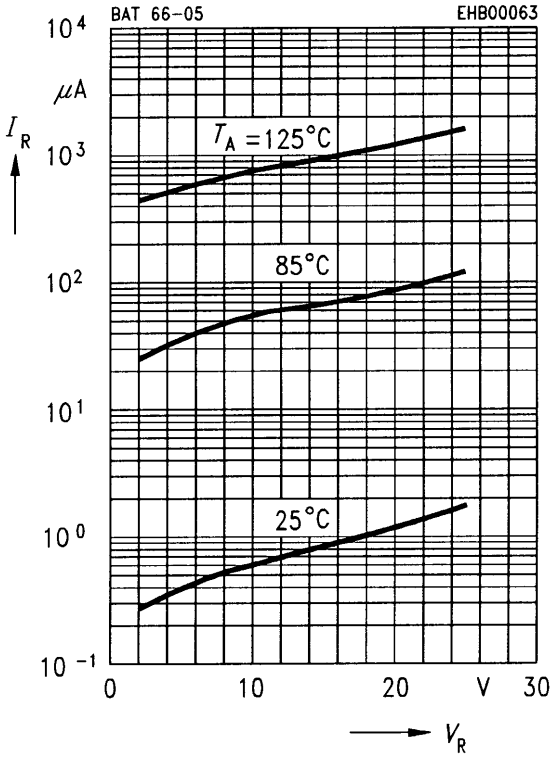
Electrical Characteristics
at T_A = 25 ˚C, unless otherwise specified.

Parameter	Symbol	Values			Unit
		min.	typ.	max.	
Reverse current	I_R				
V_R = 25 V		–	–	10	µA
V_R = 25 V, T_A = 85 ˚C		–	–	1	mA
Forward voltage	V_F				V
I_F = 10 mA		–	0.28	0.35	
I_F = 100 mA		–	0.35	–	
I_F = 1 A		–	0.47	0.60	
Diode capacitance	C_T	–	30	40	pF
V_R = 10 V, f = 1 MHz					

Forward current $I_F = f(V_F)$



Reverse current $I_R = f(V_R)$



Forward current $I_F = f(T_A^*; T_S)$
* Package mounted on epoxy