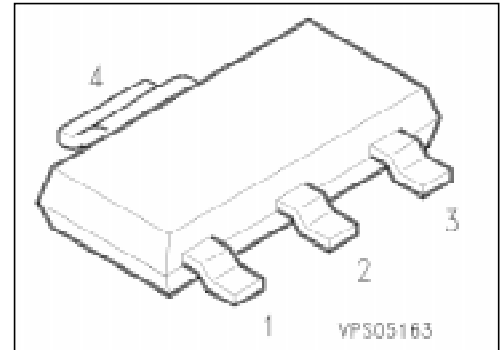


Silicon Schottky Diode

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	<p style="text-align: center;">EHA00005</p>	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.

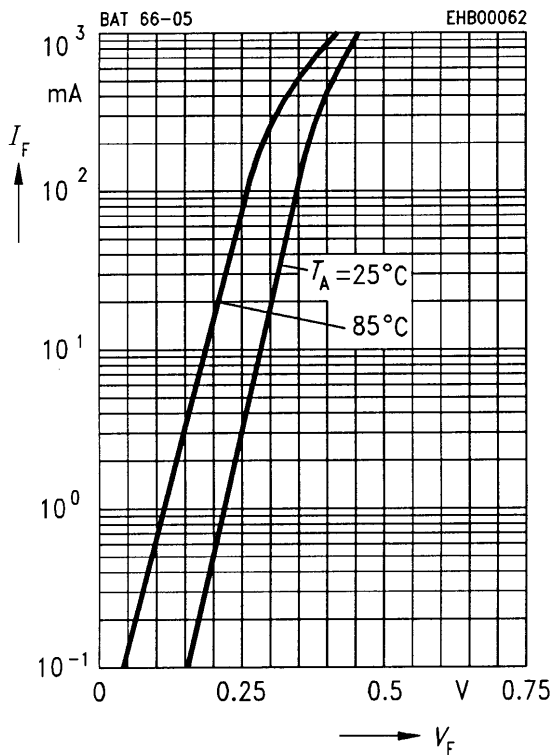
²⁾ Package mounted on epoxy pcb 40 mm × 40 mm × 1.5 mm/6 cm² Cu.

Electrical Characteristics

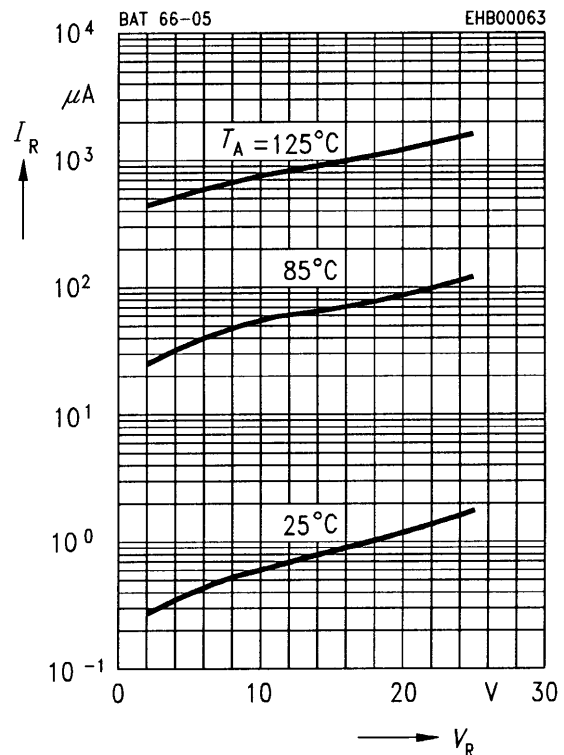
at $T_A = 25^\circ\text{C}$, unless otherwise specified.

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

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

