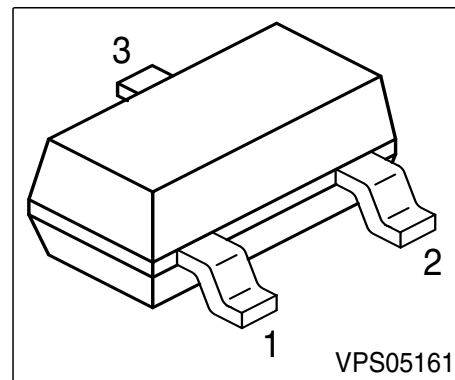


Silicon Schottky Diodes

- For low-loss, fast-recovery, meter protection, bias isolation and clamping applications
- Integrated diffused guard ring
- Low forward voltage

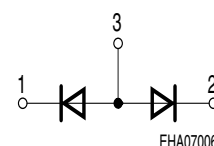
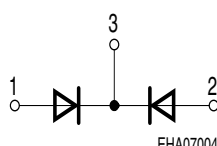
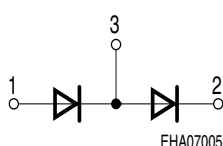


BAT 64

BAT 64-04

BAT 64-05

BAT 64-06



ESD: Electrostatic discharge sensitive device, observe handling precaution!

Type	Marking	Pin Configuration			Package
BAT 64	63s	1 = A	2 n.c.	3 = C	SOT-23
BAT 64-04	64s	1 = A1	2 = C2	3 = C1/A2	SOT-23
BAT 64-05	65s	1 = A1	2 = A2	3 = C1/2	SOT-23
BAT 64-06	66s	1 = C1	2 = C2	3 = A1/2	SOT-23

Maximum Ratings

Parameter	Symbol	Value	Unit
Diode reverse voltage	V_R	40	V
Forward current	I_F	250	mA
Average forward current (50/60Hz, sinus)	I_{FAV}	120	
Surge forward current ($t \leq 10\text{ms}$)	I_{FSM}	800	
Total power dissipation, $T_S = 61^\circ\text{C}$	P_{tot}	250	mW
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 ... 150	

Maximum Ratings

Junction - ambient ¹⁾	R_{thJA}	≤ 495	K/W
Junction - soldering point	R_{thJS}	≤ 355	

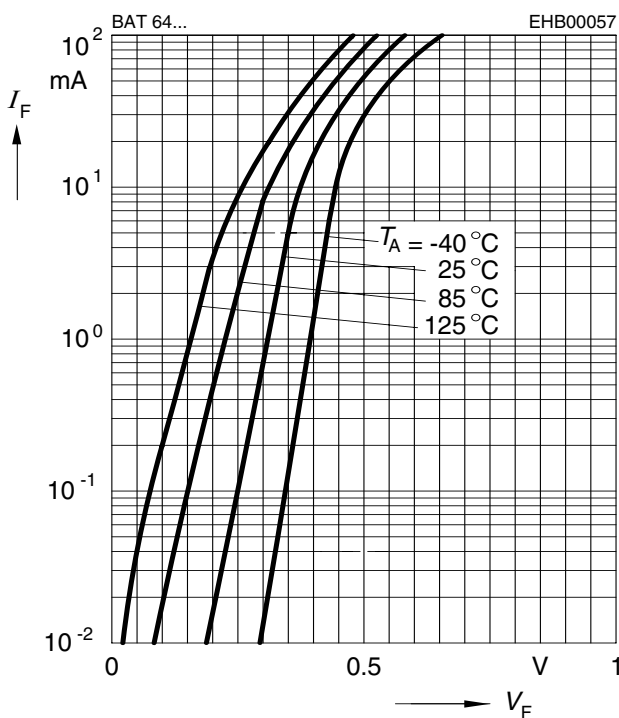
1) Package mounted on epoxy pcb 40mm x 40mm x 1.5mm / 0.5cm² Cu

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	-	-	2	μA
Reverse current $V_R = 25\text{ V}$, $T_A = 150\text{ }^{\circ}\text{C}$	I_R	-	-	200	μA
Forward voltage $I_F = 1\text{ mA}$ $I_F = 10\text{ mA}$ $I_F = 30\text{ mA}$ $I_F = 100\text{ mA}$	V_F	- - - -	320 385 440 570	350 430 520 750	mV
AC characteristics					
Diode capacitance $V_R = 1\text{ V}$, $f = 1\text{ MHz}$	C_T	-	4	6	pF

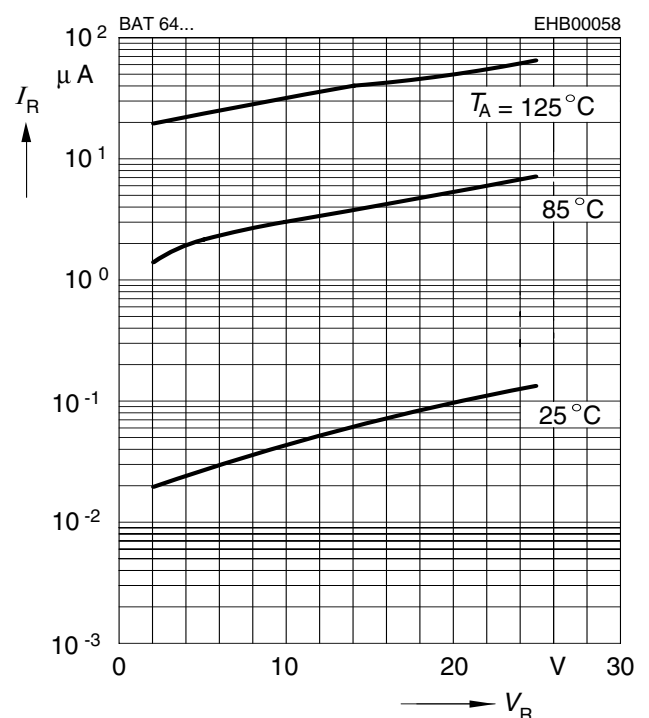
Forward current $I_F = f(V_F)$

$T_A = \text{Parameter}$



Reverse current $I_R = f(V_R)$

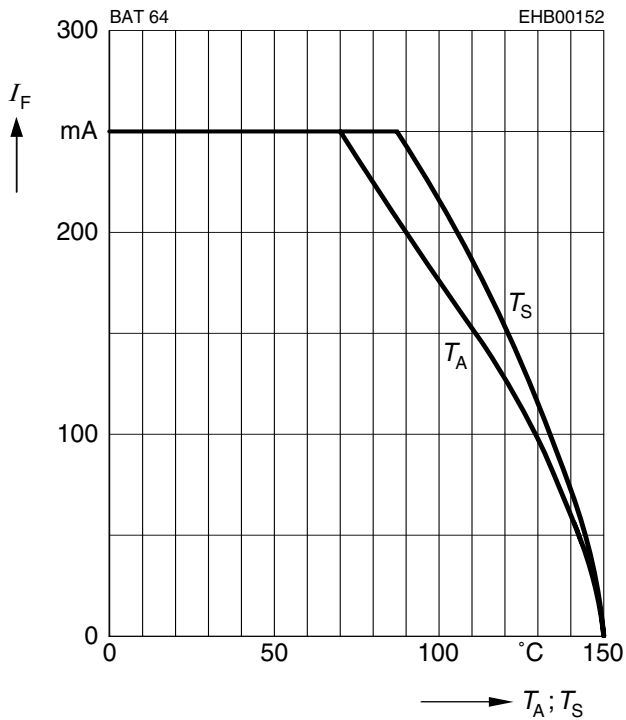
$T_A = \text{Parameter}$



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

*Package mounted on epoxy

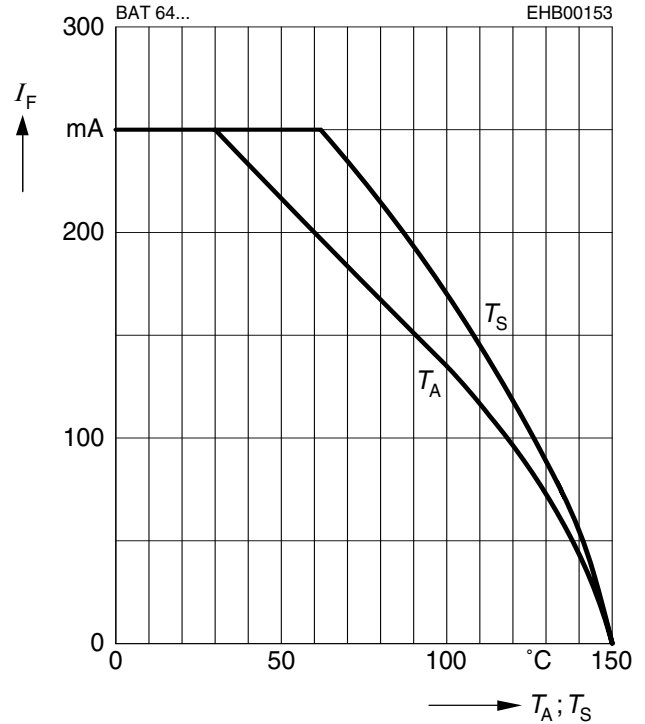
BAT 64



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

*Package mounted on epoxy

BAT 64-04... (I_F per Diode)



Diode capacitance $C_T = f(V_R)$

$f = 1\text{MHz}$

