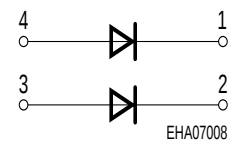
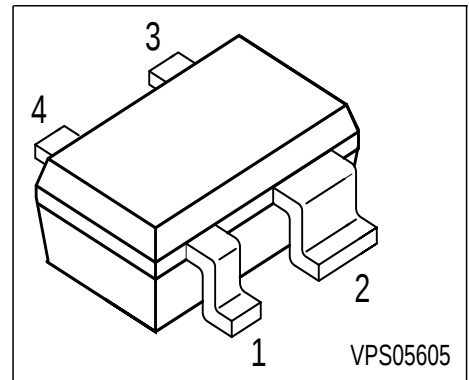


Silicon Schottky Diodes

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



ESD: Electrostatic discharge sensitive device, observe handling precaution!

Type	Marking	Pin Configuration				Package
BAT64-07W	67s	1 = C1	2 = C2	3 = A2	4 = A1	SOT343

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 ($t < 10ms$)	I_{FSM}	800	
Total power dissipation, $T_S \leq 104^\circ C$	P_{tot}	250	mW
Junction temperature	T_j	150	$^\circ C$
Storage temperature	T_{stg}	-55 ... 150	

Thermal Resistance

Junction - soldering point ¹⁾	R_{thJS}	≤ 185	K/W
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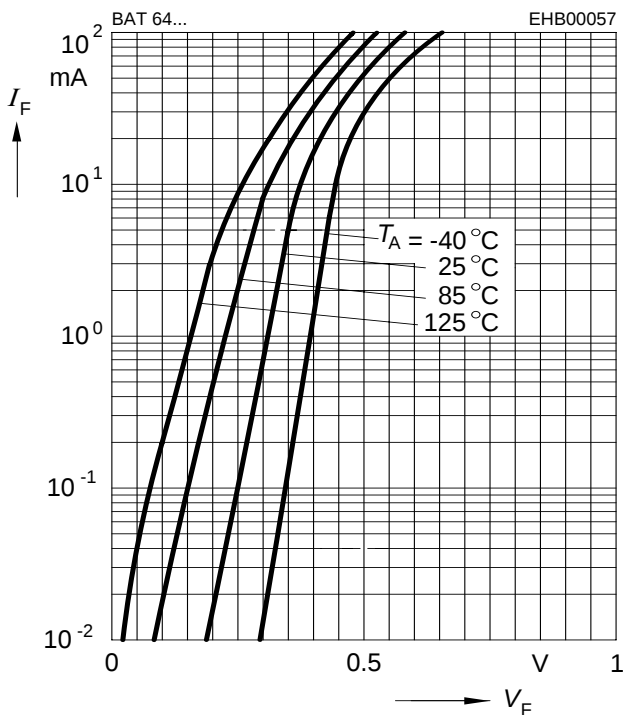
¹⁾For calculation of R_{thJA} please refer to Application Note Thermal Resistance

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

Parameter	Symbol	Values			Unit
		min.	typ.	max.	
DC characteristics					
Reverse current $V_R = 30\text{ V}$	I_R	-	-	2	μA
Reverse current $V_R = 30\text{ V}, T_A = 85\text{ }^{\circ}\text{C}$	I_R	-	-	200	
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

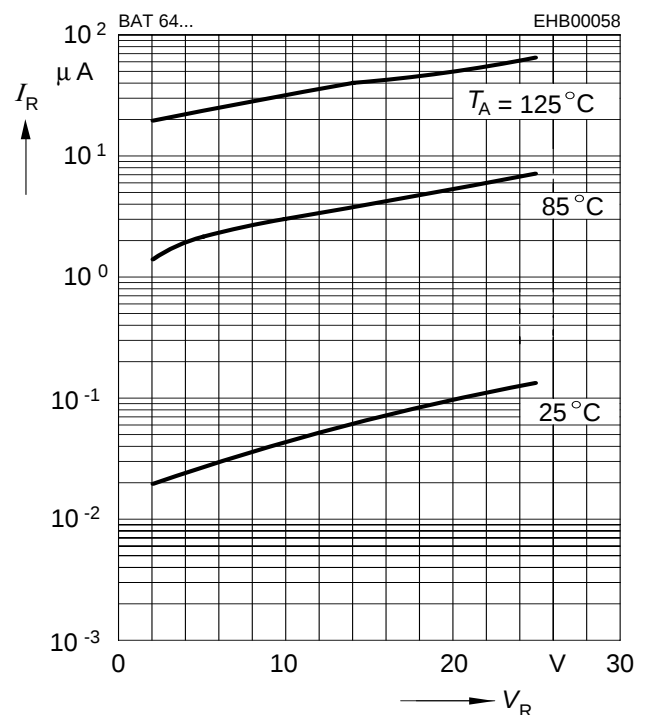
Forward current $I_F = f(V_F)$

$T_A = \text{Parameter}$

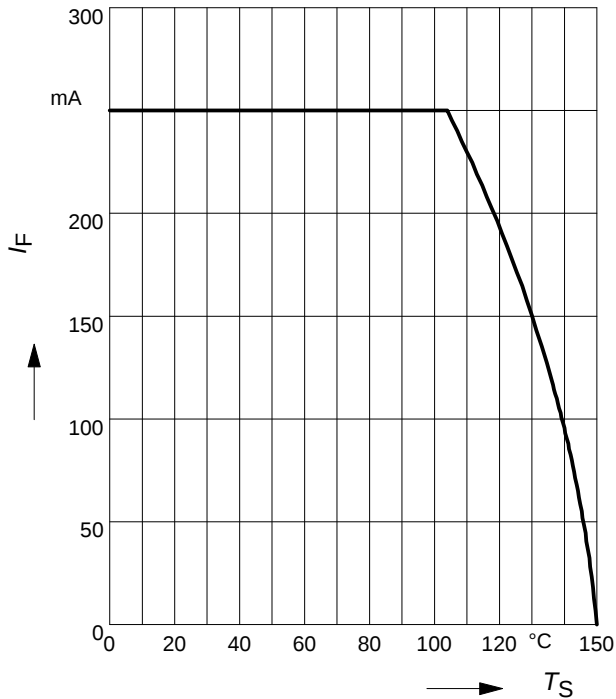


Reverse current $I_R = f(V_R)$

$T_A = \text{Parameter}$

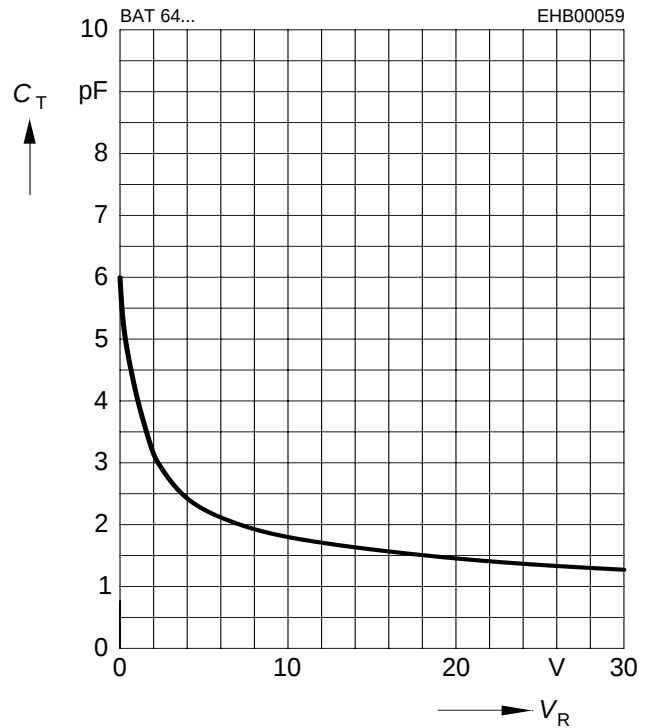


Forward current $I_F = f(T_S)$

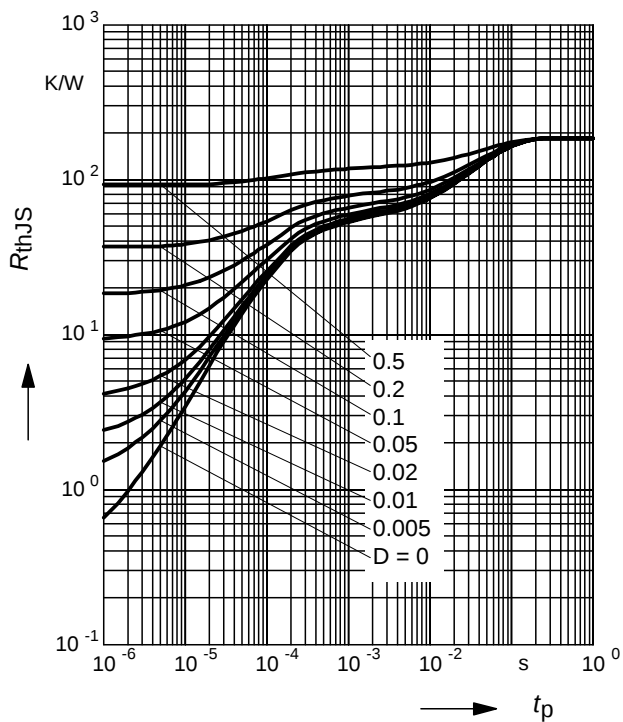


Diode capacitance $C_T = f(V_R)$

$f = 1\text{MHz}$



Permissible Pulse Load $R_{THJS} = f(t_p)$



Permissible Pulse Load $I_{Fmax}/I_{FDC} = f(t_p)$

