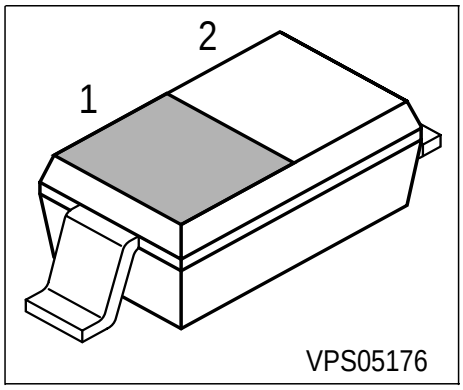
Silicon Schottky Diode



- High current rectifier Schottky diode with extreme low V_F drop
- For power supply
- For clamping and protection in low voltage applications
- For detection and step-up-conversion

ESD: **E**lectro**s**tatic **d**ischarge sensitive device, observe handling precaution!

Type	Marking	Pin Configuration		Package
BAT60A	white/3	1 = C	2 = A	SOD323

Maximum Ratings

Parameter	Symbol	Value	Unit
Diode reverse voltage	V_R	10	V
Forward current	I_F	3	A
Surge forward current (t < 10ms)	I_{FSM}	5	
Total power dissipation, T_S = 28 °C	P_{tot}	1350	mW
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	-55 ... 150	

Thermal Resistance

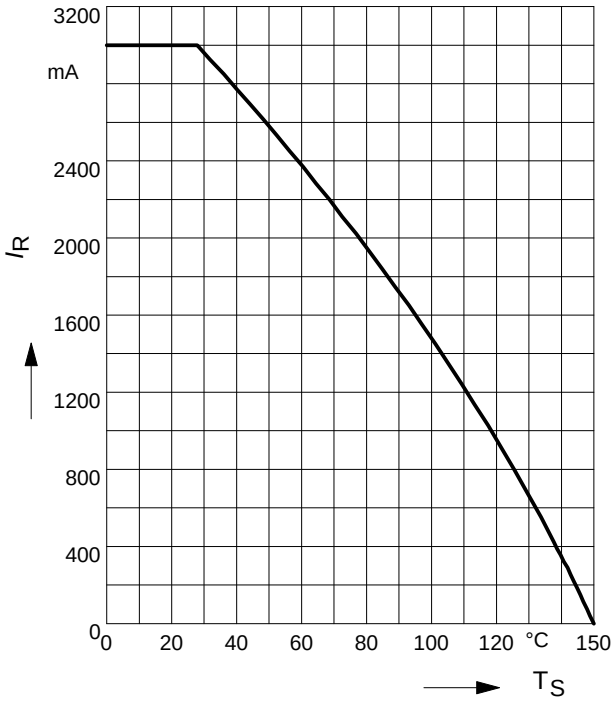
Junction - soldering point[1)]	R_{thJS}	≤ 90	K/W

[1]For calculation of R_{thJA} please refer to Application Note Thermal Resistance

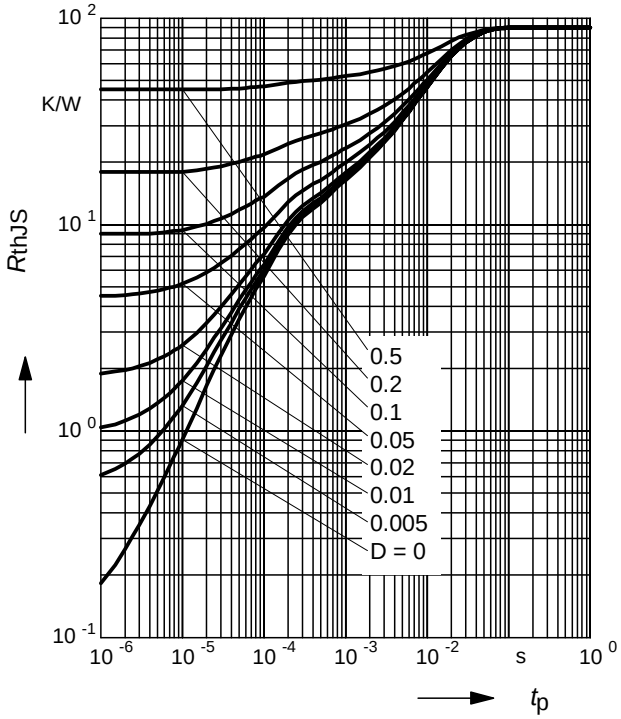
Electrical Characteristics at T_A = 25 °C, unless otherwise specified.

Parameter	Symbol	Values			Unit
		min.	typ.	max.	
DC characteristics					
Reverse current	I_R				mA
V_R = 5 V		-	0.3	-	
V_R = 8 V		-	0.6	2.6	
Reverse current	I_R	-	18	-	
V_R = 8 V, T_A = 80 °C					
Forward voltage	V_F				V
I_F = 10 mA		0.1	0.12	0.15	
I_F = 100 mA		-	0.2	-	
I_F = 1000 mA		-	0.3	-	
AC characteristics					
Diode capacitance	C_T	-	20	-	pF
V_R = 5 V, f = 1 MHz					

Forward current $I_F = f(T_S)$

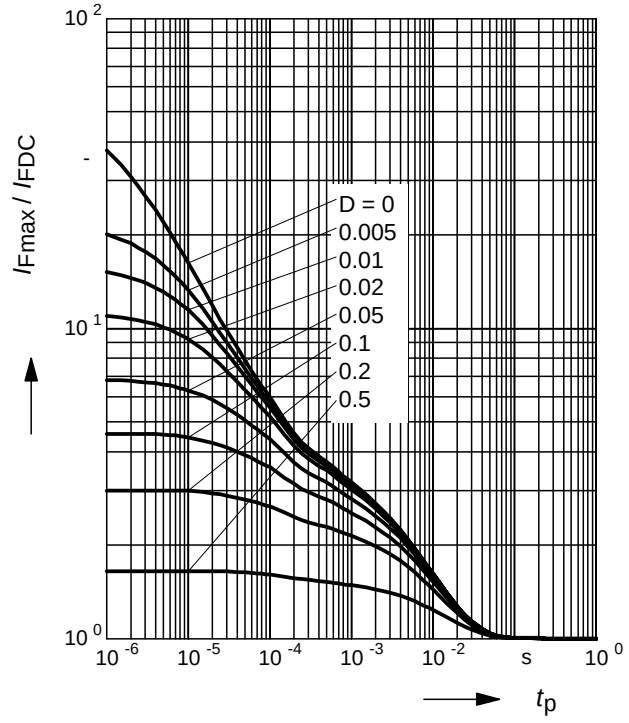


Permissible Pulse Load $R_{thJS} = f(t_p)$



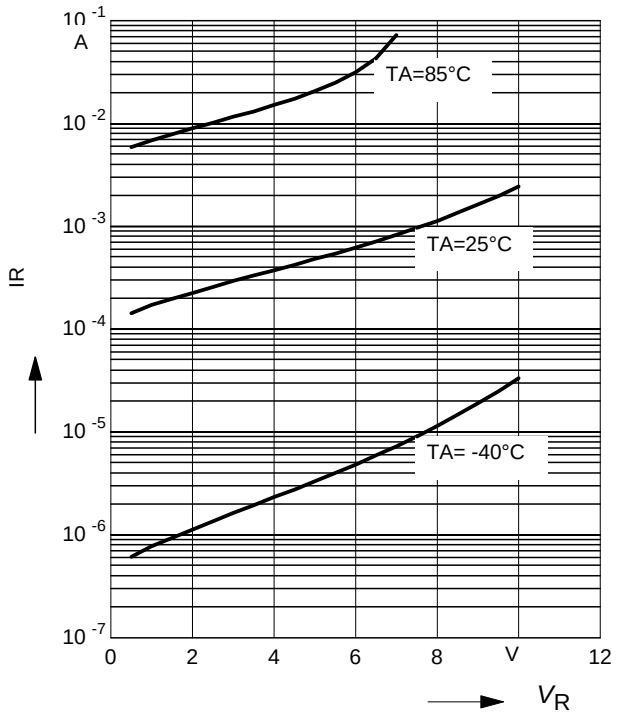
Permissible Pulse Load

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



Reverse current $I_R = f(V_R)$

T_A = Parameter



Forward current $I_F = f(V_F)$

T_A = Parameter