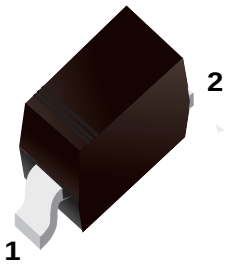
BAT60A

Schottky Diodes



■ **Simplified outline(SOD-323)**

■ Features

- Fast Switching Speed
- For General Purpose Switching Applications.
- High Conductance

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Reverse Voltage	V_{RM}	10	V
Forward Current	I_F	3	A
Peak Forward Surge Current (t≤10ms)	I_{FM}	5	
Power Dissipation TS≤28℃	P_d	1350	mW
Thermal Resistance Junction to Point[1]	$R_{\theta JS}$	≤90	K/W
Junction Temperature	T_J	150	℃
Operating Temperature Range	T_{OP}	-55 to 85	
Storage Temperature range	T_{stg}	-55 to 150	

NOTES:

1.For calculation of RthJA please refer to Application Note Thermal Resistance

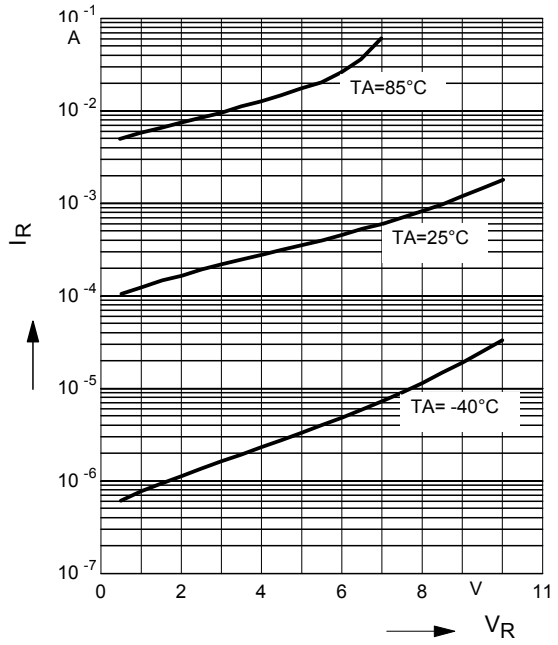
■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	V_R	I_R= 100 uA	10			V
Forward voltage	V_F	I_F= 10 mA			0.15	V
		I_F= 100 mA			0.23	
		I_F= 1000mA			0.37	
Reverse voltage leakage current	I_R	V_R= 5 V			1	mA
		V_R= 8 V			2.6	
		V_R=5 V,T_A=80 ℃		18		
Junction capacitance	C_j	V_R= 5 V, f= 1 MHz			35	pF

■ Typical Characterisitics

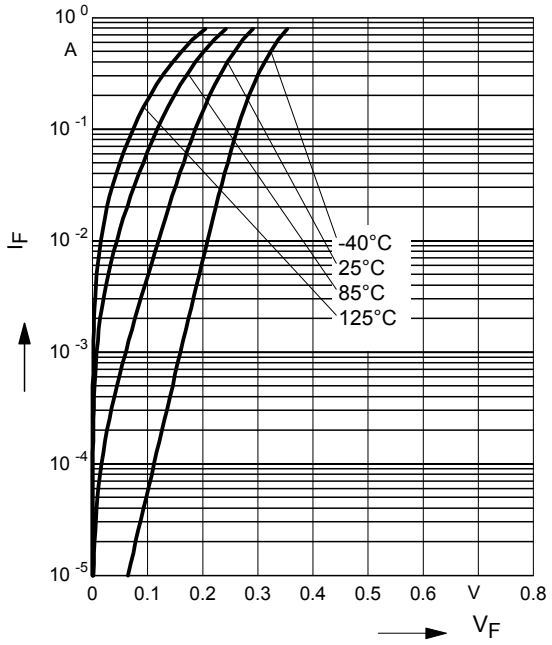
Reverse current $I_R = f(V_R)$

T_A = Parameter



Forward current $I_F = f(V_F)$

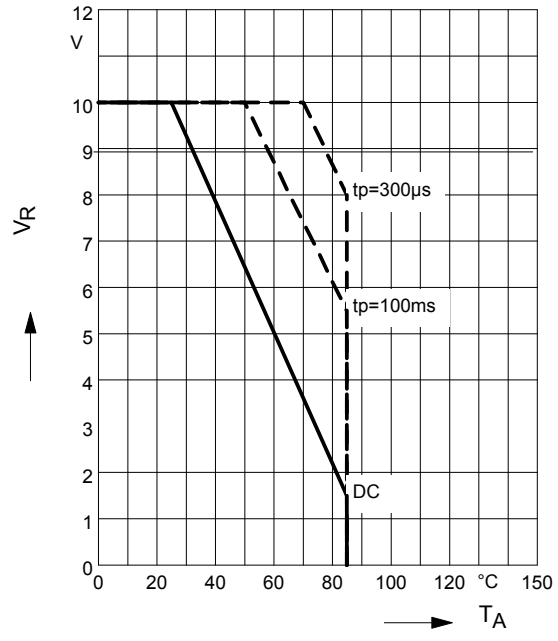
T_A = Parameter



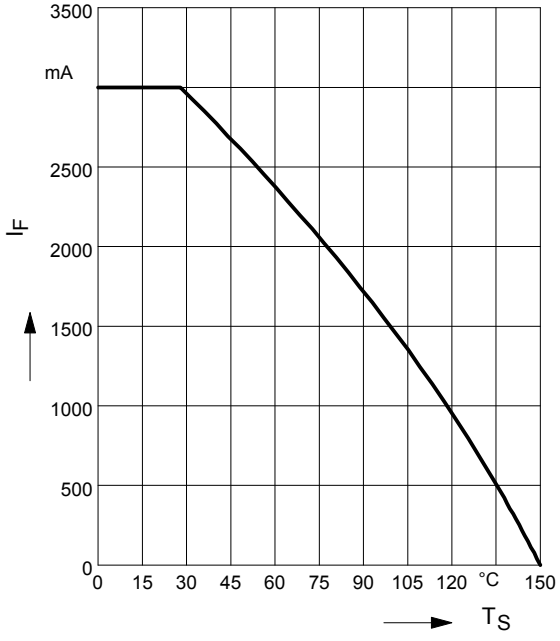
Permissible Reverse voltage $V_R = f(T_A)$

t_p = Parameter; duty cycle < 0.01

Device mounted on PCB with R_{th} = 160 K/W

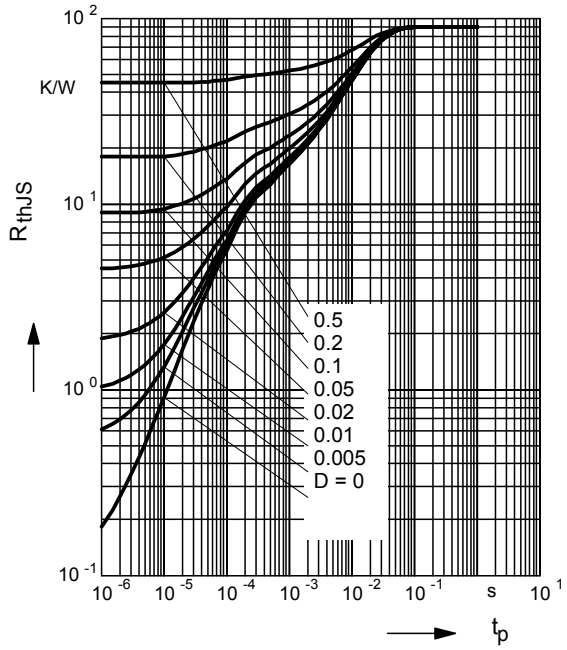


Forward current $I_F = f(T_S)$



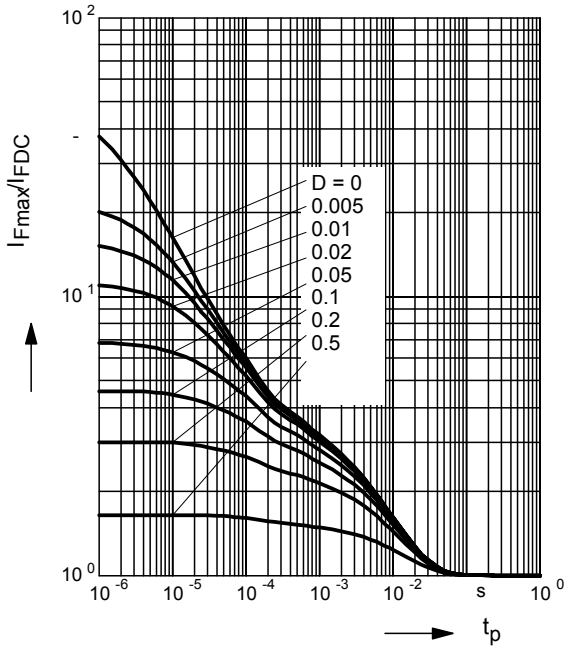
■ Typical Characterisitics

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

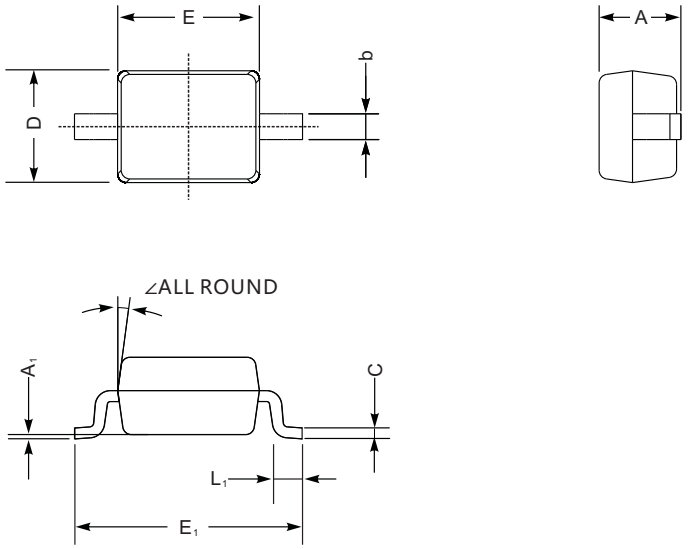


Permissible Pulse Load

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



■ SOD-323



SOD-323 mechanical data

UNIT		A	C	D	E	E_1	b	L_1	A_1	∠
mm	max	1.1	0.15	1.4	1.8	2.75	0.4	0.45	0.2	9°
	min	0.8	0.08	1.2	1.4	2.55	0.25	0.2	—	
mil	max	43	5.9	55	70	108	16	16	8	
	min	32	3.1	47	63	100	9.8	7.9	—	

■ The recommended mounting pad size