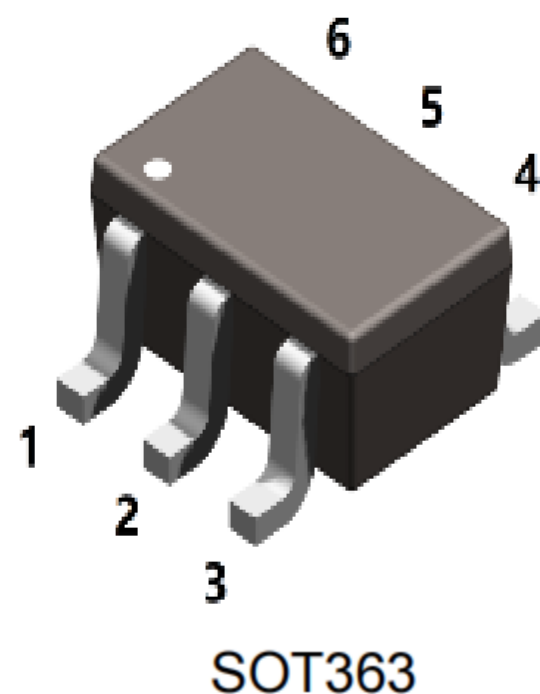


Features

- General rectification
- Low V_F ; Low I_R
- High reliability

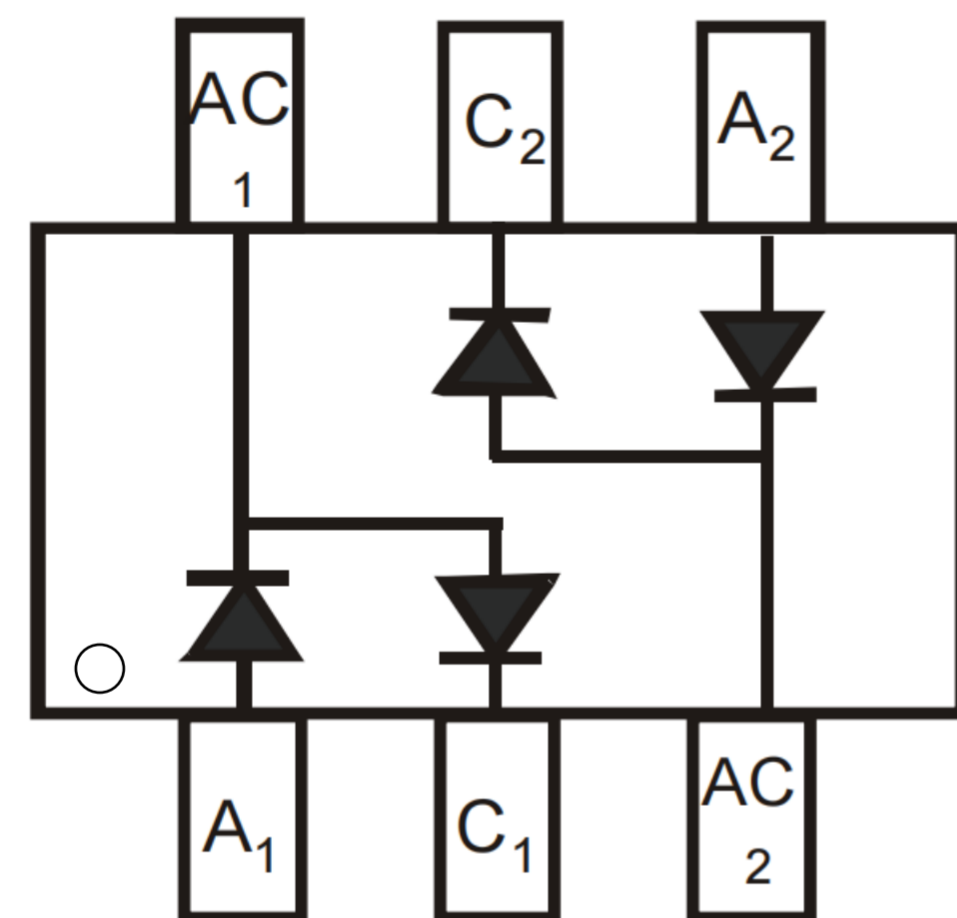


Applications

surface mount schottky barrier rectifier

Ordering Information

Shipping Qty:3000/7inch Tape& Reel



BAT54SDW

Absolute Maximum Ratings ($T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Limits	Unit
Peak Repetitive Peak reverse voltage	V_{RRM}	30	V
Working Peak Reverse Voltage	V_{RWM}		
DC Reverse Voltage	V_R		
Forward Continuous Current	I_F	200	mA
Repetitive Peak Forward Current	I_{FRM}	300	mA
Forward surge current@tp<1s	I_{FSM}	600	mA
Power Dissipation *	P_d	200	mW
* part mounted on FR-4 board with recommended pad layout			

Thermal Characteristics ($T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Limits	Unit
Thermal resistance junction to ambient air	$R_{\theta JA}$	500	$^\circ\text{C}/\text{W}$
Junction temperature	T_j	125	$^\circ\text{C}$
Storage temperature range	T_{STG}	-55 to +150	$^\circ\text{C}$

Electrical Characteristics (T =25°C unless otherwise noted)

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse Breakdown Voltage	$V_{(BR)}$	$I_R=100\mu A$	30			V
Forward voltage *1	V_F	$I_F=0.1mA$			0.24	V
		$I_F=1mA$			0.32	V
		$I_F=10mA$			0.40	V
		$I_F=30mA$			0.50	V
		$I_F=100mA$			1.00	V
Reverse current *2	I_R	$V_R=25V$			2	μA
Capacitance Between Terminals	C_T	$V_R=1V, f=1MHz$			10	pF
Reverse Recovery Time	t_{rr}	$I_F=I_R=10mA$ $I_R=0.1 \times I_R, R_L=100\Omega$			5	ns
*1: pulse test, $t_p \leq 300\mu s$ *2: pulse test, $t_p \leq 5ms$						

Typical Electrical Characteristic Curves

FIG 1.TYPICAL REVERSE CHARACTERISTIC

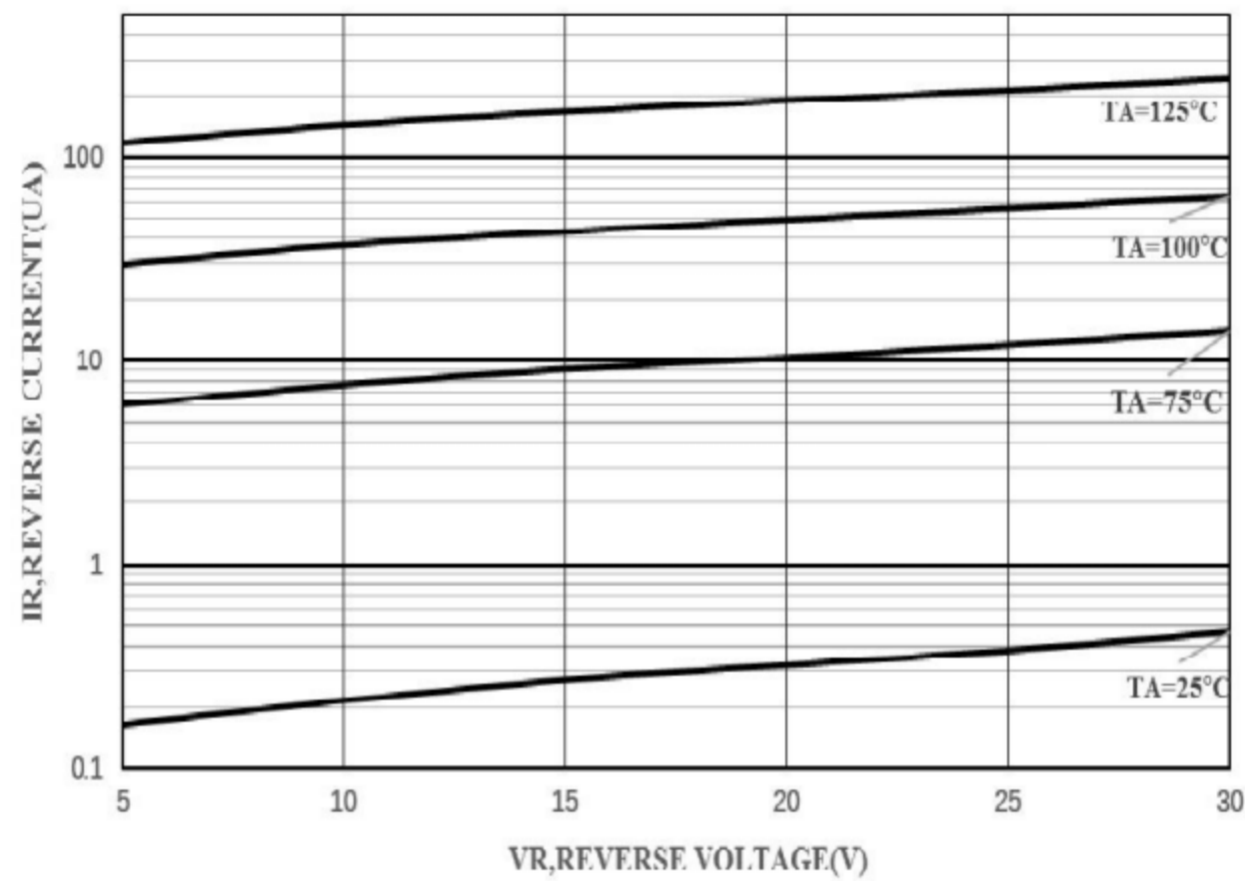


FIG 2.TYPICAL FORWARD CHARACTERISTIC

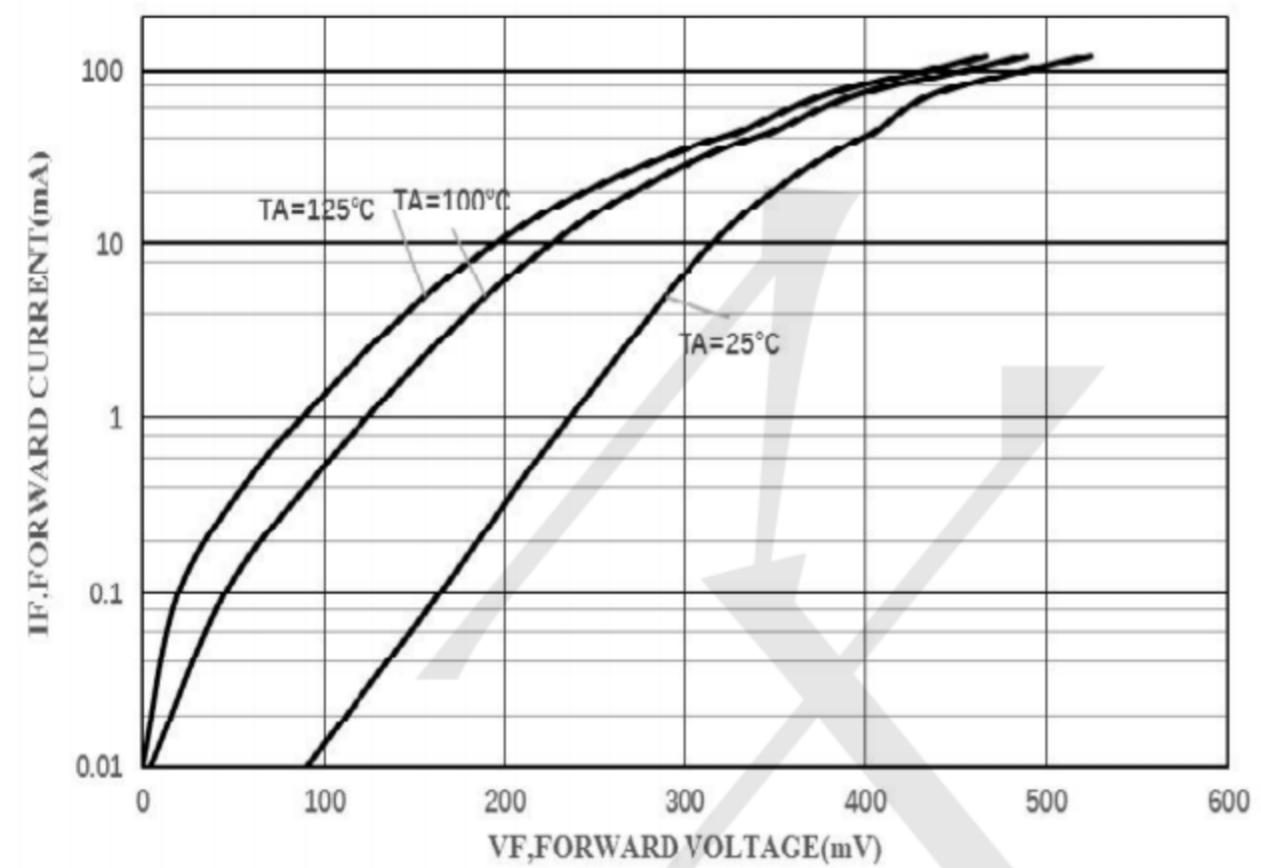


FIG 3.CAPACITANCE VS REVERSE VOLTAGE

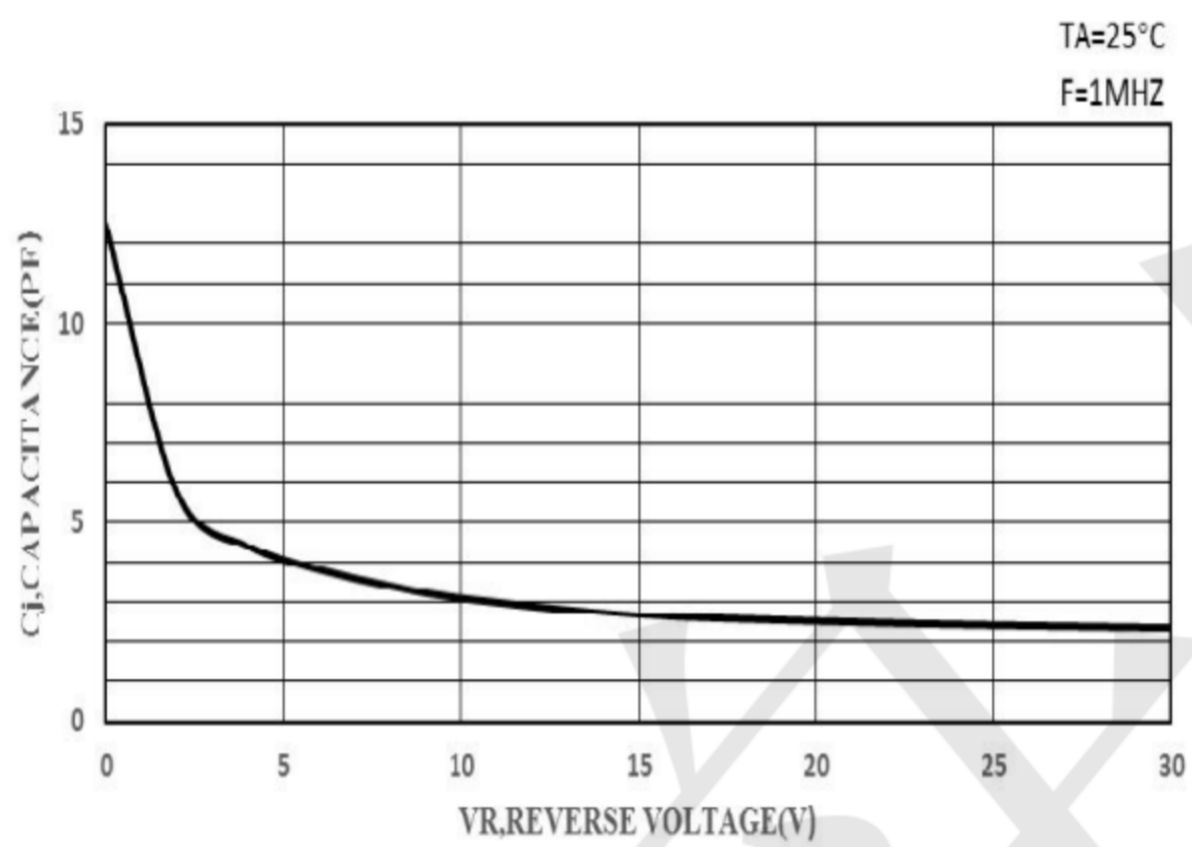
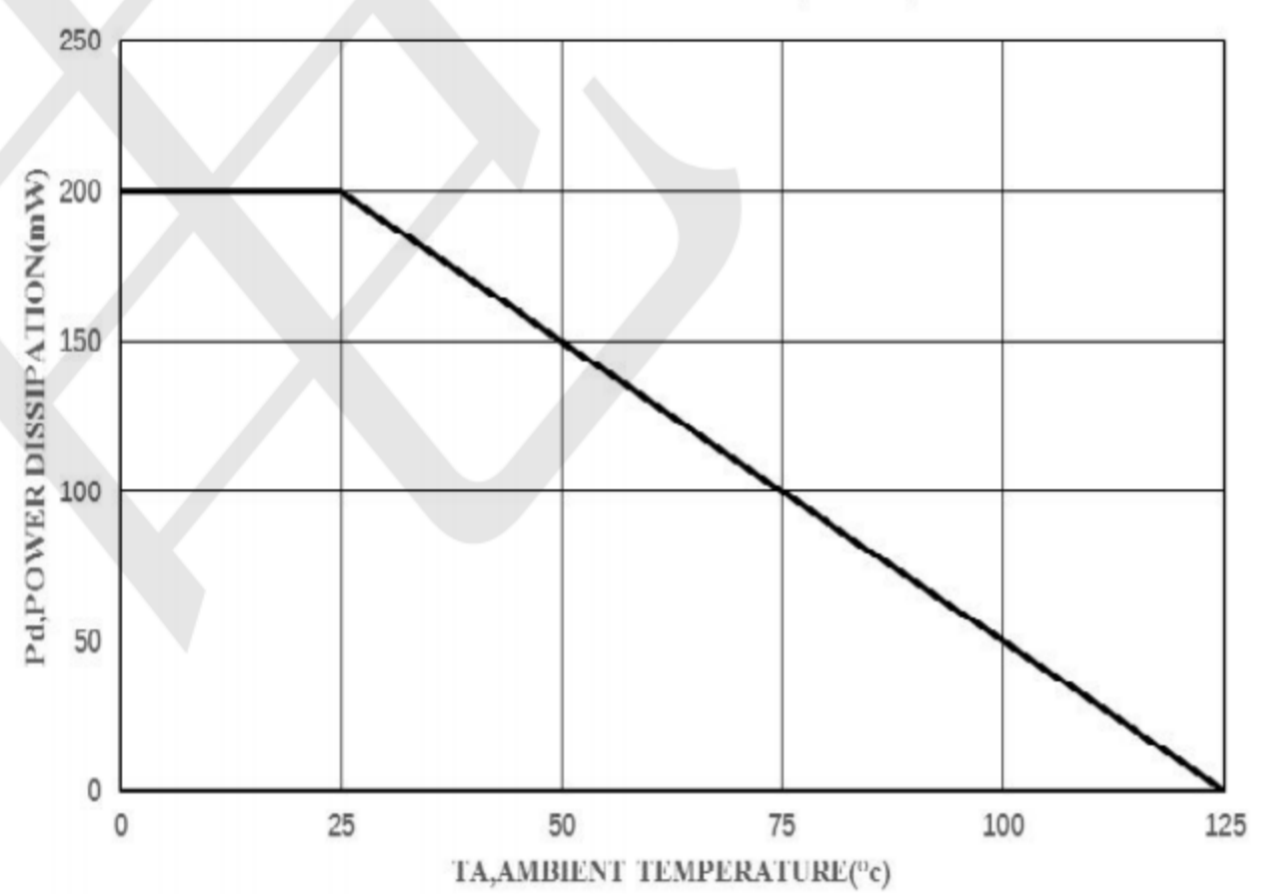
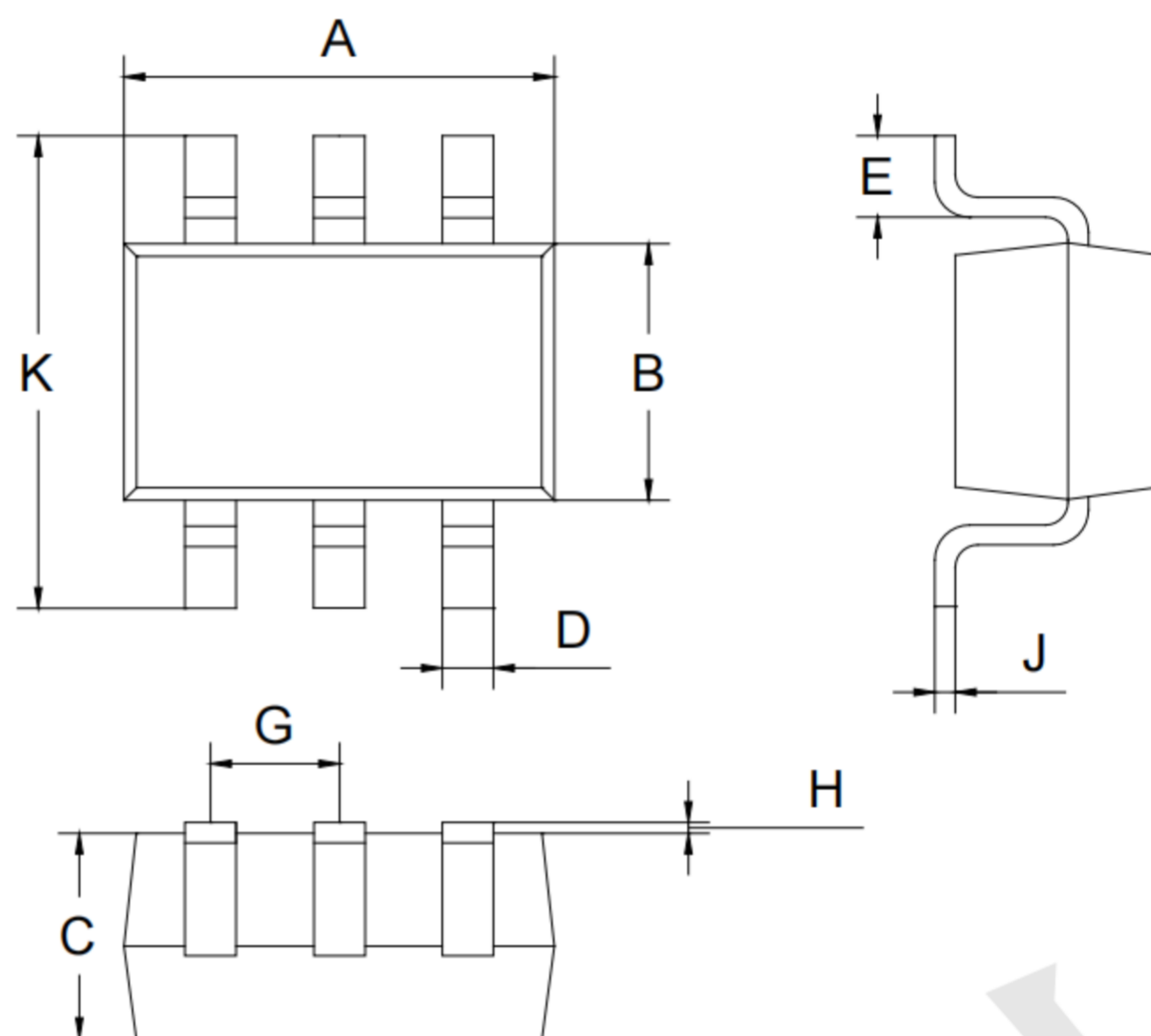


FIG 4.DERATING CURVE(P_d - T_A)



Outline Drawing - SOT363 (unit: mm)



SOT-363		
Dim	Min	Max
A	2.00	2.20
B	1.15	1.35
C	0.85	1.05
D	0.15	0.35
E	0.25	0.40
G	0.60	0.70
H	0.02	0.10
J	0.05	0.15
K	2.20	2.40

Mounting Pad Layout-SOT363 (unit: mm)

