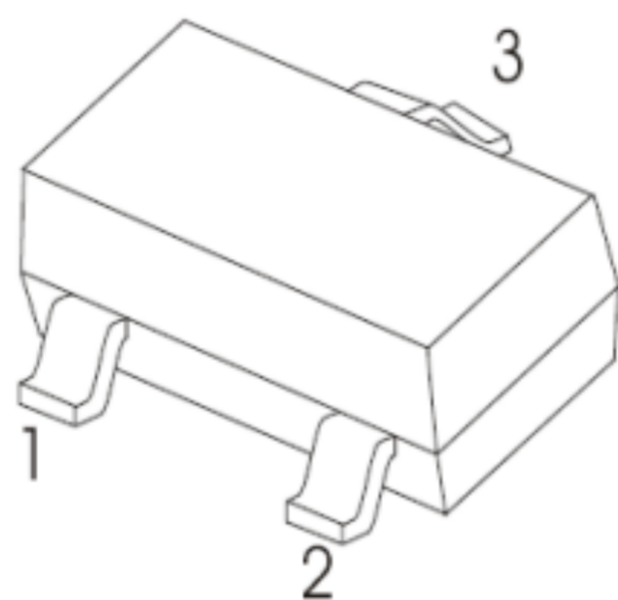


Features

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



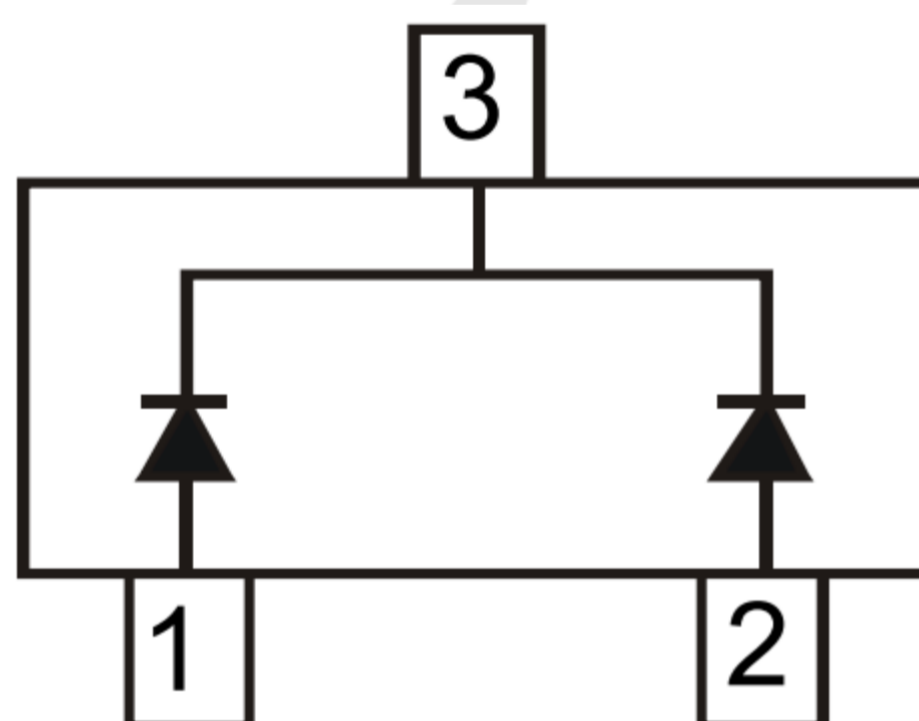
SOT-323

Applications

- surface mount schottky barrier rectifier

Ordering Information

- Shipping Qty:3000/7inch Tape& Reel



BAS70W-05

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

Parameter	Symbol	Limits	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	70	V
Working Peak Reverse Voltage	V_{RWM}		
DC Reverse Voltage	V_R		
Forward Continuous Current *	I_F	70	mA
Non-Repetitive Peak Forward Surge Current@ $t_p=8.3\text{ms}$	I_{FSM}	100	mA
Power Dissipation *	P_d	200	mW
* part mounted on FR-4 board with recommended pad layout			

Thermal Characteristics

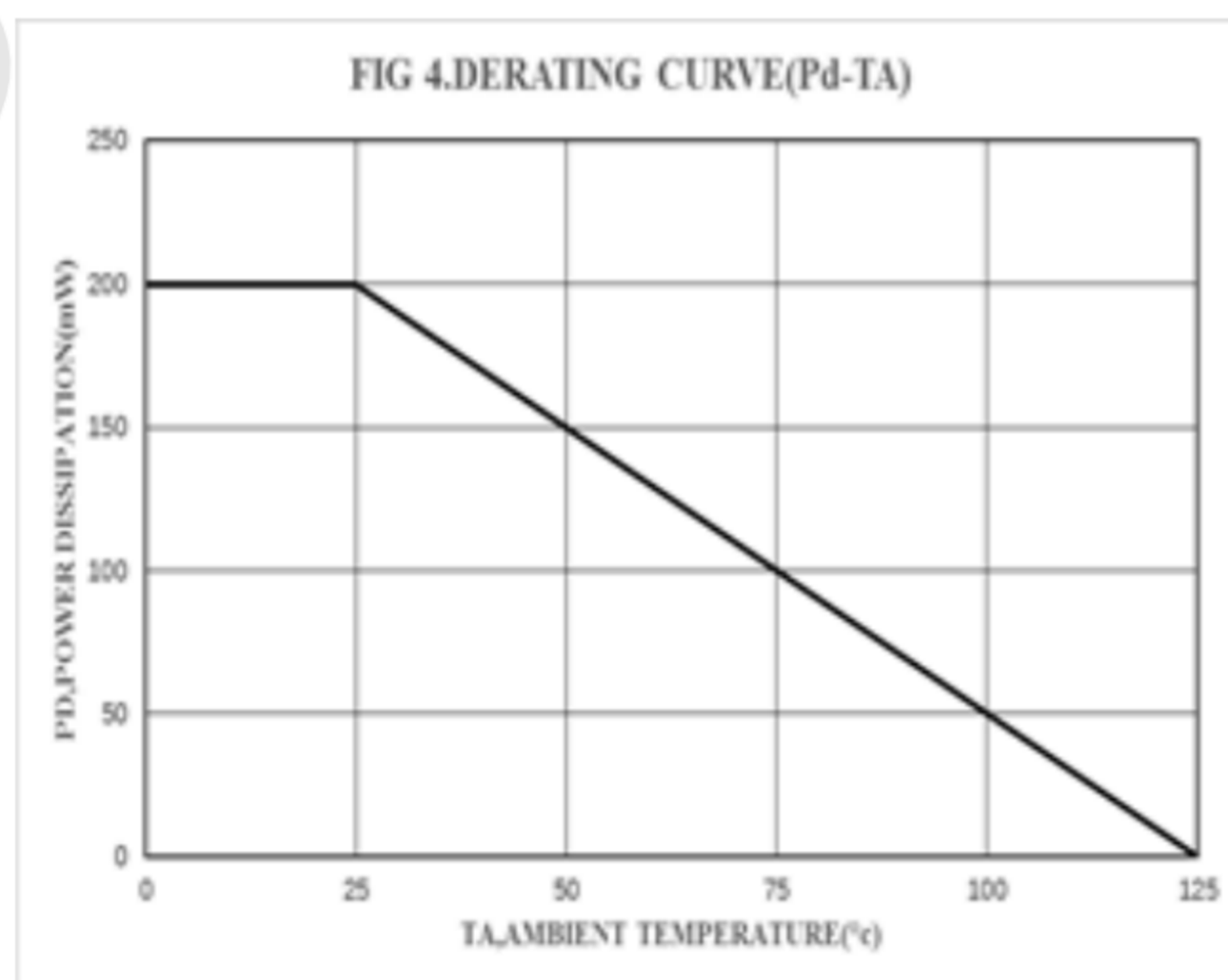
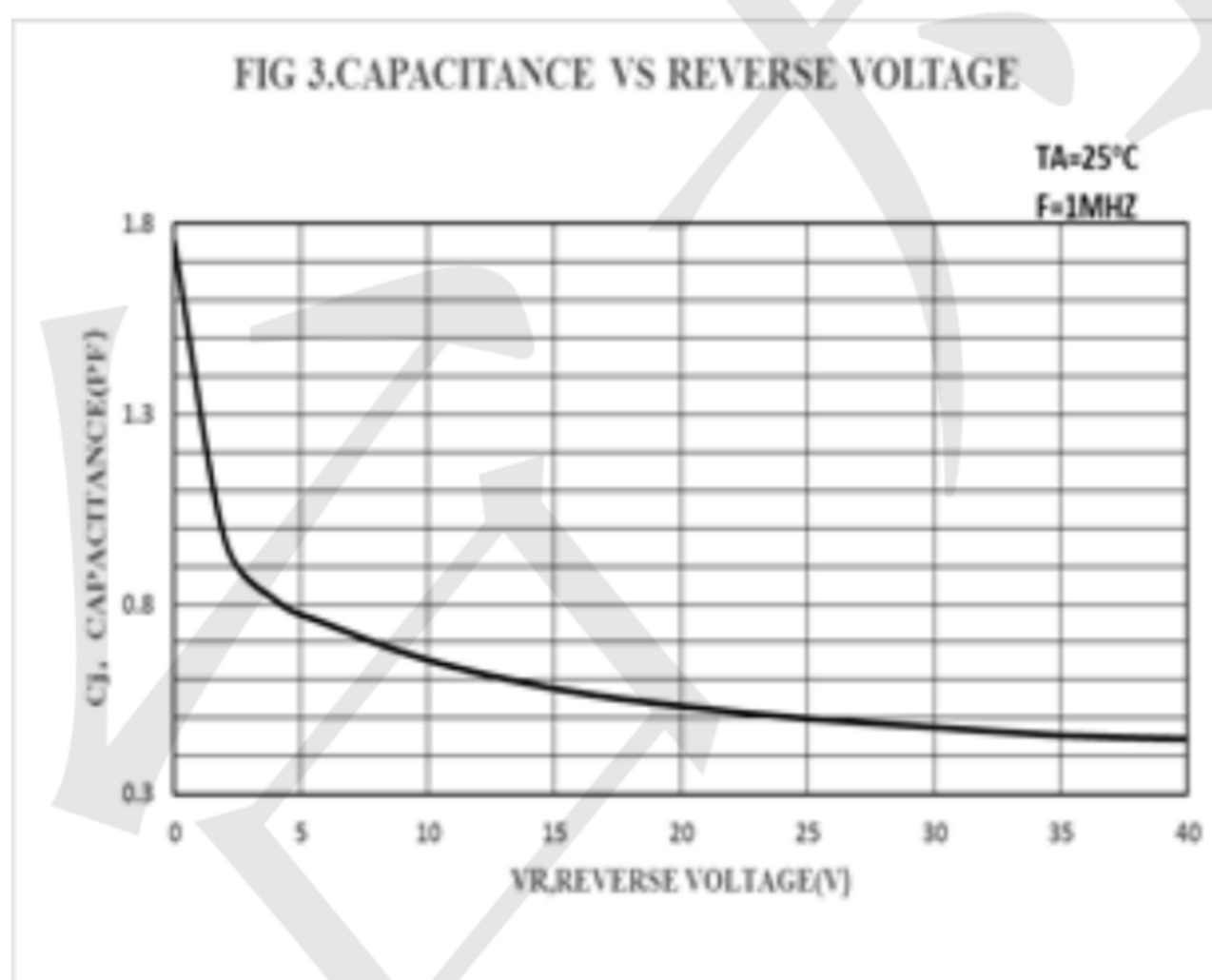
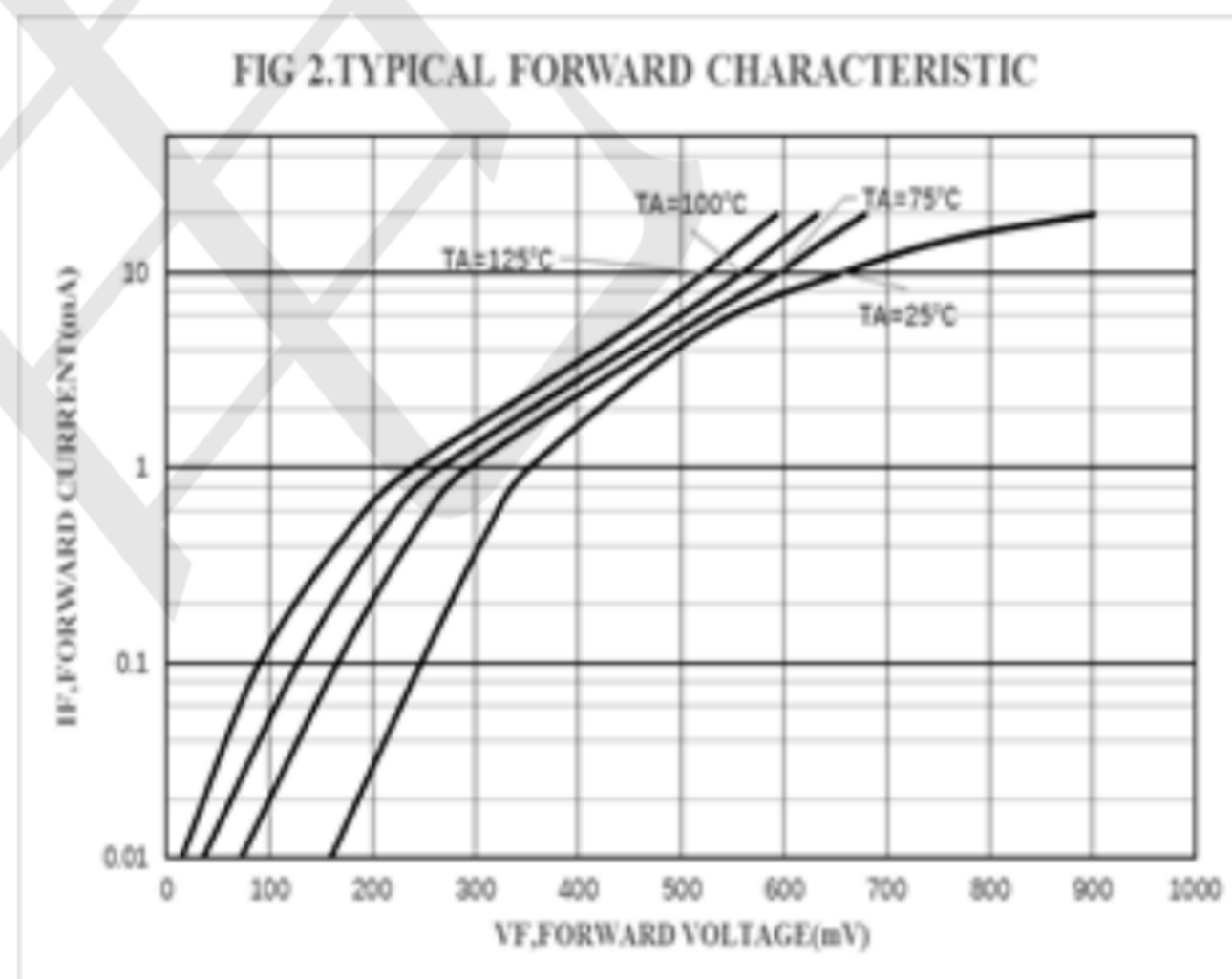
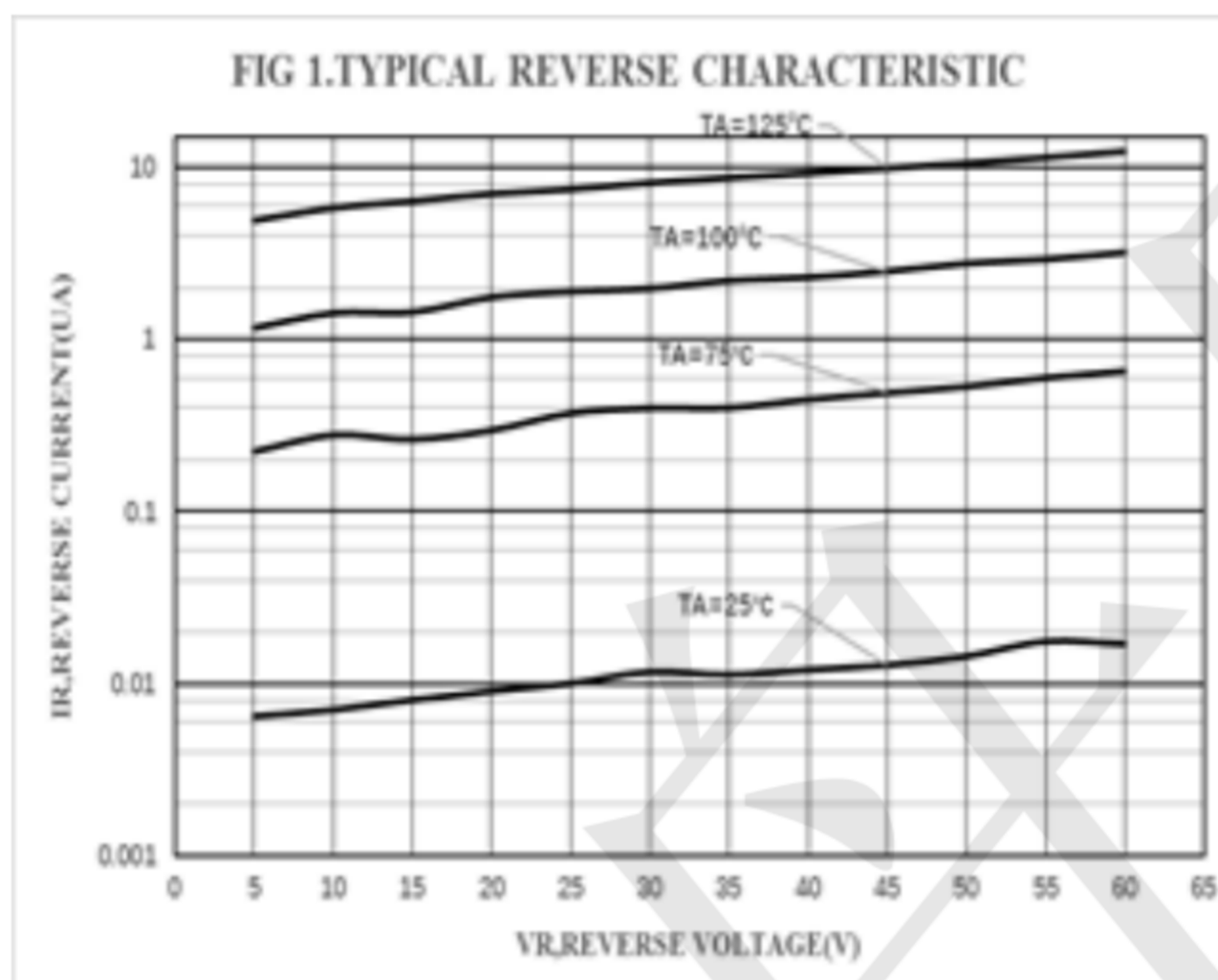
Parameter	Symbol	Limits	Unit
Thermal Resistance, Junction to Ambient Air	$R_{\theta JA}$	500	$^\circ\text{C}/\text{W}$
Operating Junction Temperature Range	T_j	-55 to +125	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150	$^\circ\text{C}$

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

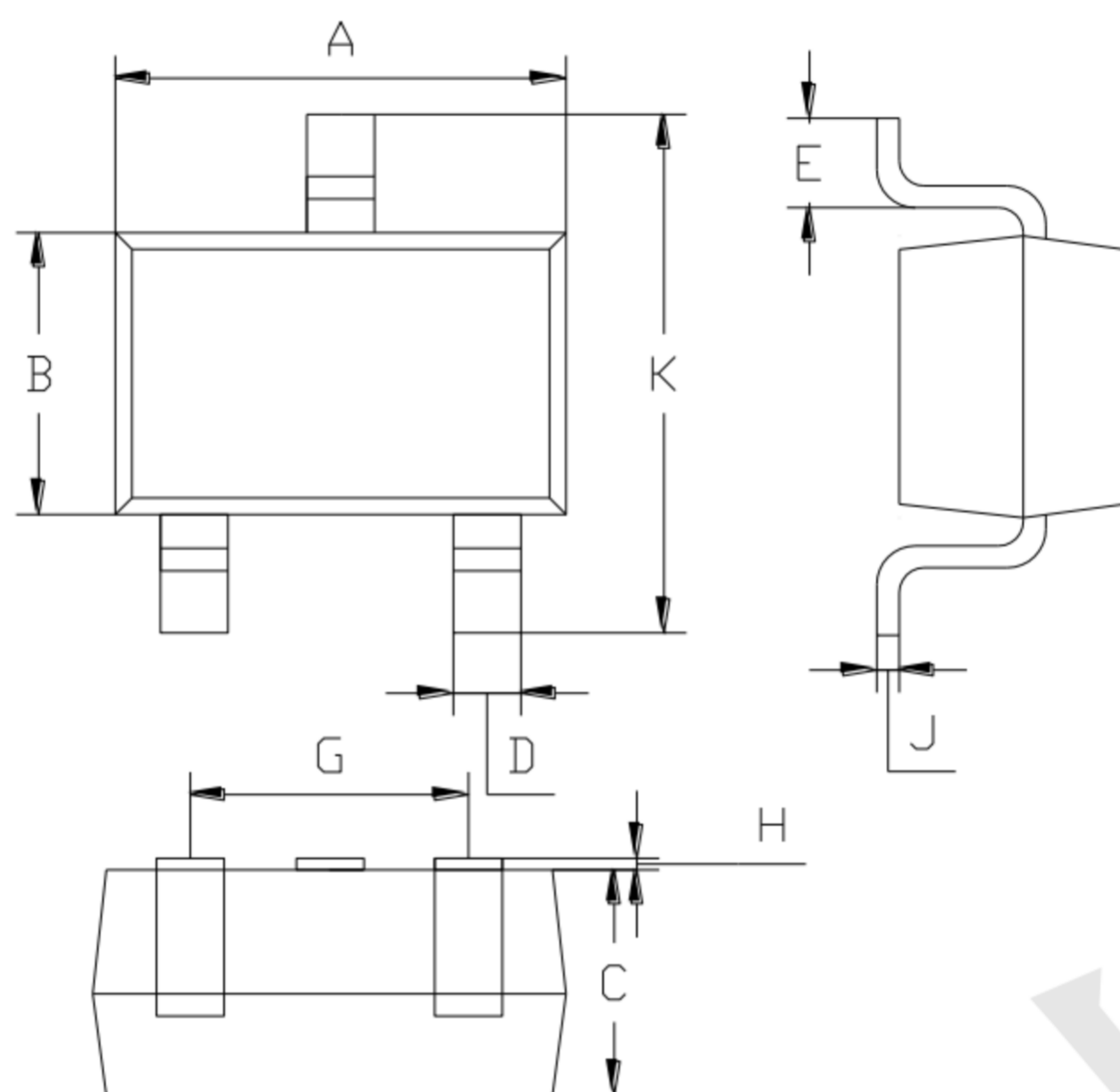
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward Voltage *1	V_F	$I_F=1\text{mA}$			0.41	V
		$I_F=15\text{mA}$			1	V
Reverse Leakage Current *2	I_R	$V_R=50\text{V}$			100	nA
Capacitance Between Terminals	C_T	$V_R=0\text{V}, f=1\text{MHz}$			2	pF
Reverse Recovery Time	t_{rr}	$I_F=I_R=10\text{mA}, R_L=100\Omega$			5	ns

*1: pulse test, $t_p \leq 300\mu\text{s}$
*2: pulse test, $t_p \leq 5\text{ms}$

Typical Electrical Characteristic Curves



Outline Drawing - SOT-323 (unit: mm)



SOT-323		
Dim	Min	Max
A	2.00	2.20
B	1.15	1.35
C	0.90	1.10
D	0.15	0.35
E	0.25	0.40
G	1.20	1.40
H	0.02	0.10
J	0.05	0.15
K	2.20	2.40

Mounting Pad Layout-SOT323(unit: mm)

