

Features

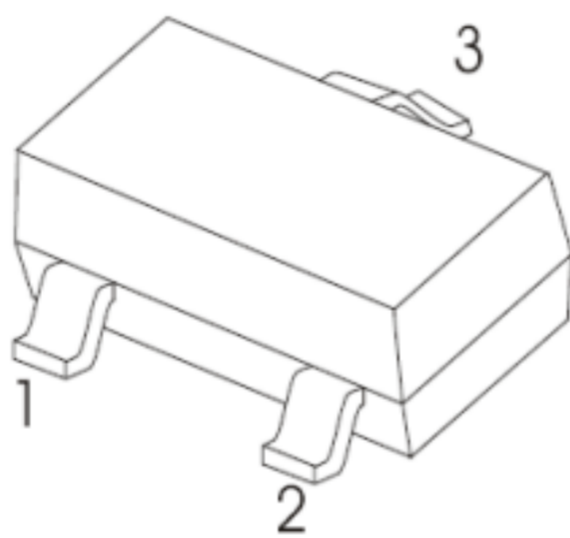
- General rectification
- Low V_F ; Low I_R
- High reliability

Applications

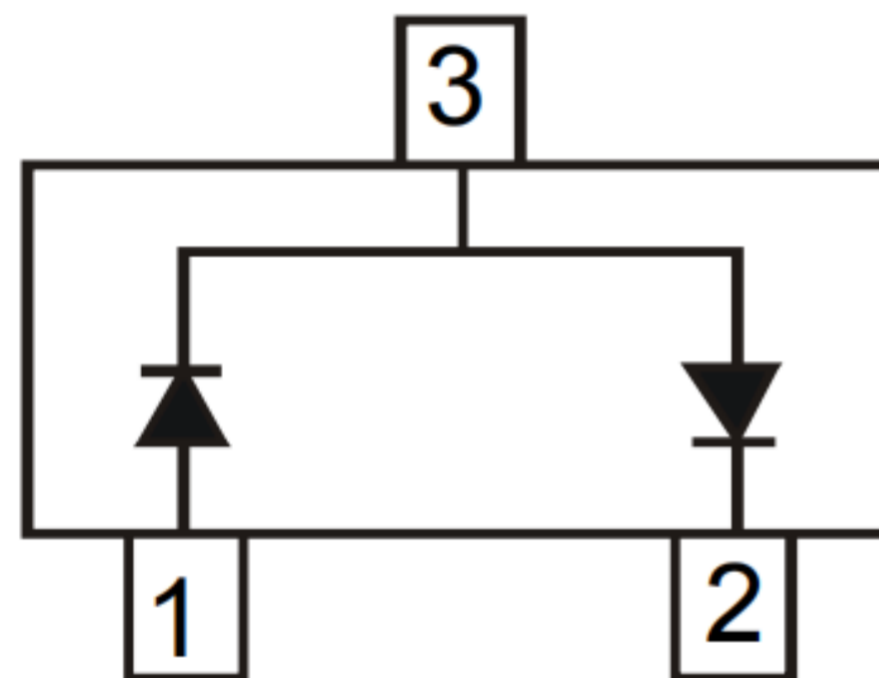
- surface mount schottky barrier rectifier

Ordering Information

- Shipping Qty:3000/7inch Tape& Reel



SOT-323



BAS40W-04

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

Parameter	Symbol	Limits	Unit
Peak Repetitive Peak reverse voltage Working Peak Reverse Voltage DC Reverse Voltage	V_{RRM} V_{RW} V_R	40	V
RMS Reverse voltage	$V_{R(RMS)}$	28	V
Forward Continuous Current	I_{FM}	200	mA
Non-Repetitive peak forward surge Current@8.3ms	I_{FSM}	600	mA
Power Dissipation *	P_D	200	mW
* part mounted on FR-4 board with recommended pad layout			

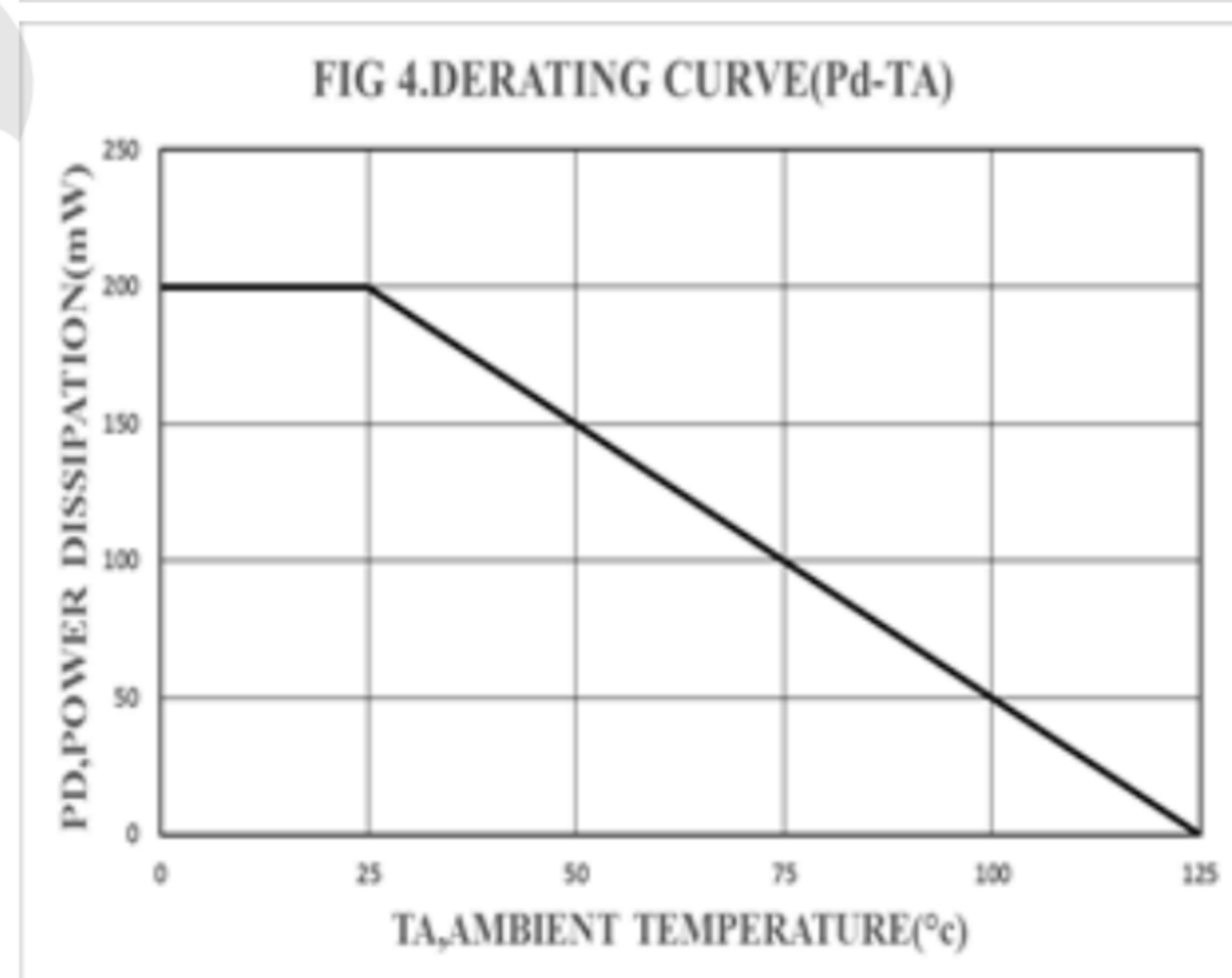
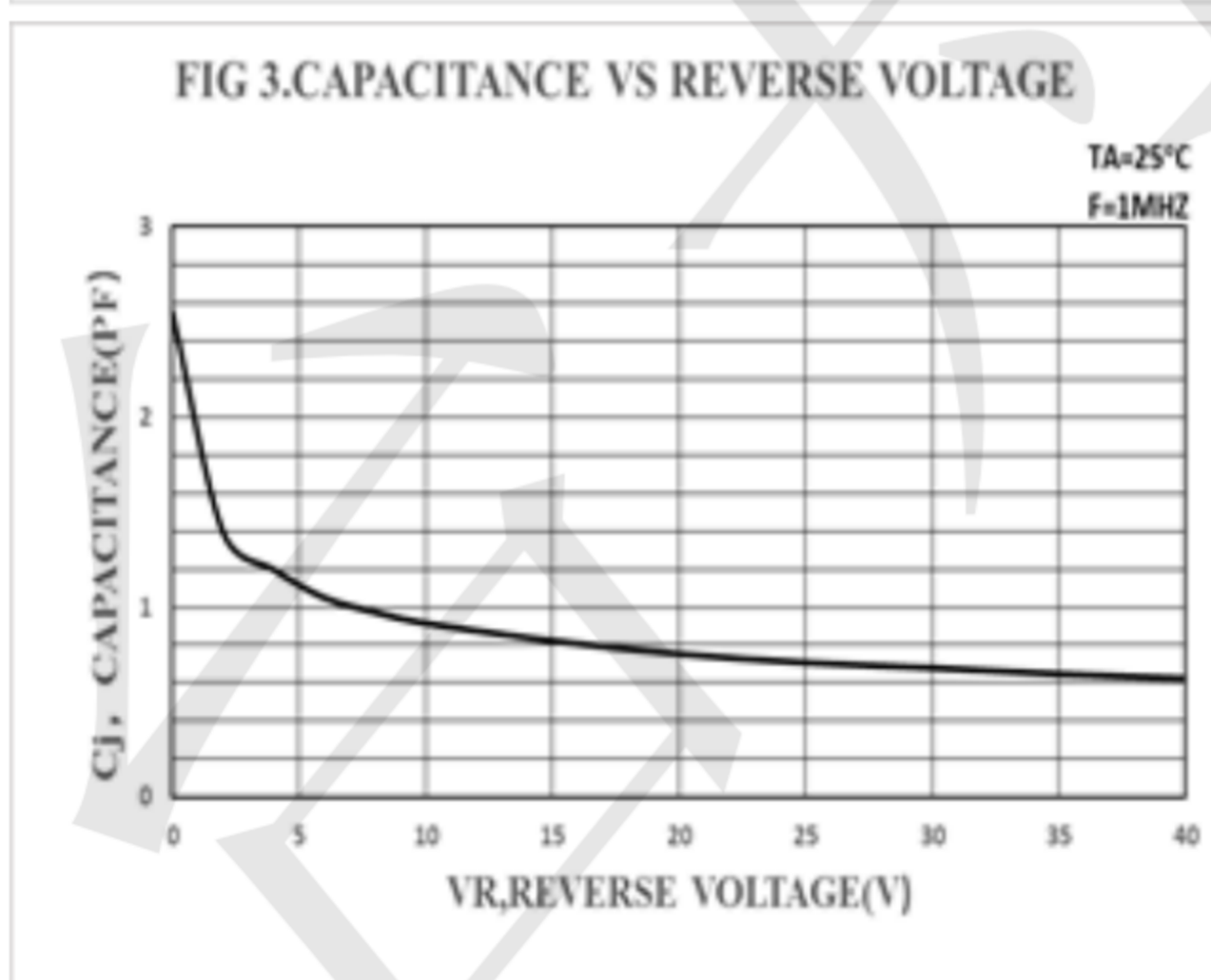
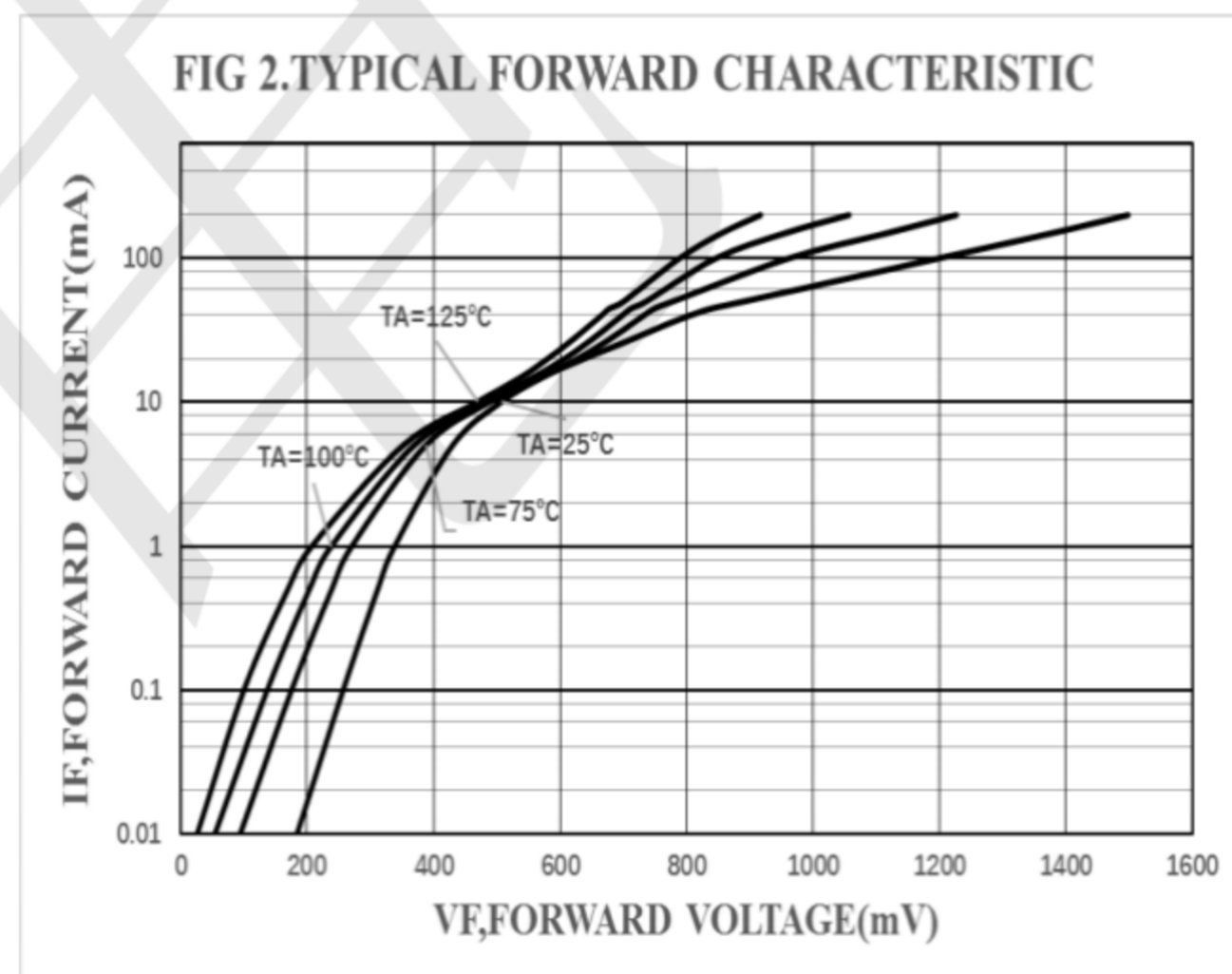
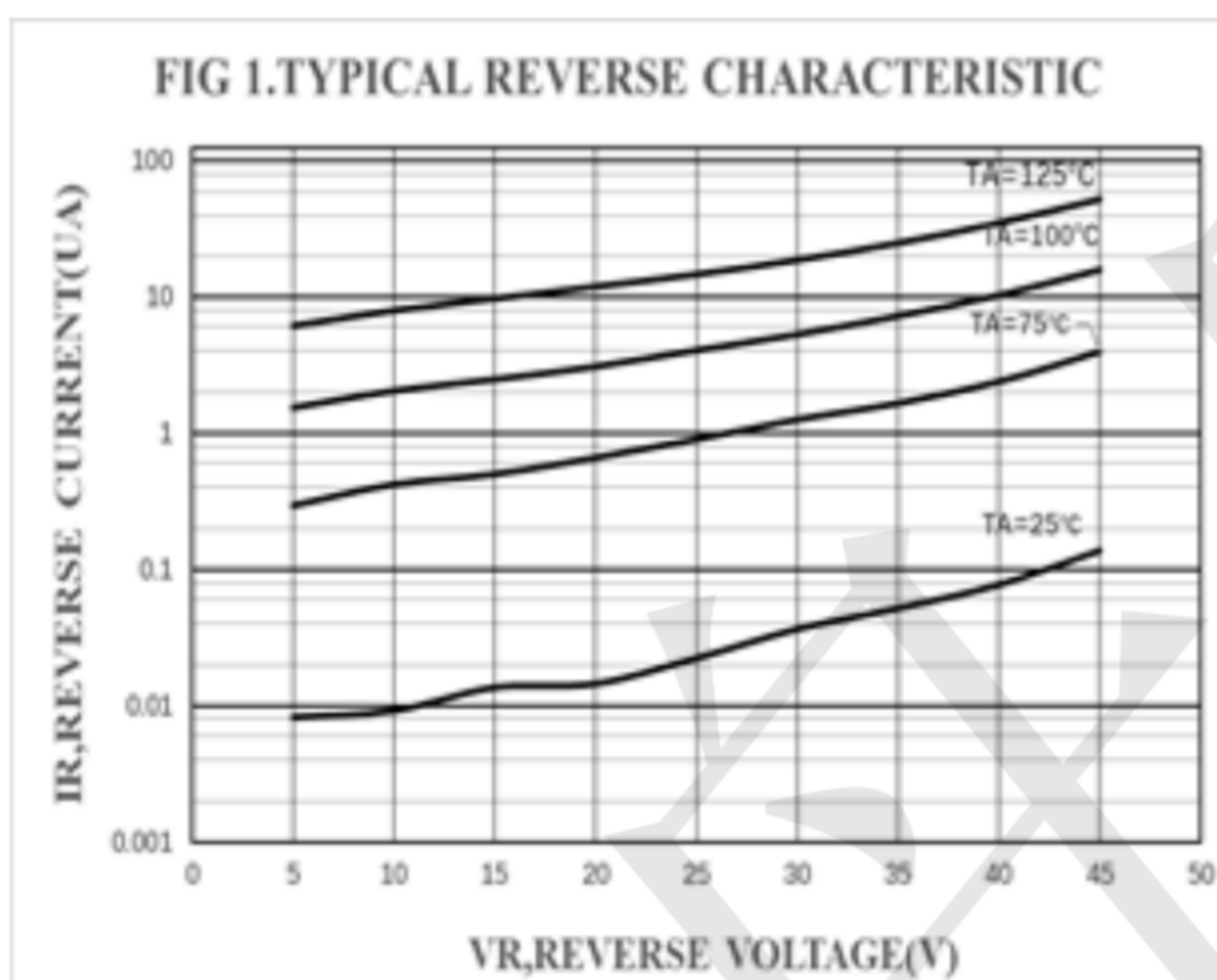
Thermal Characteristics

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

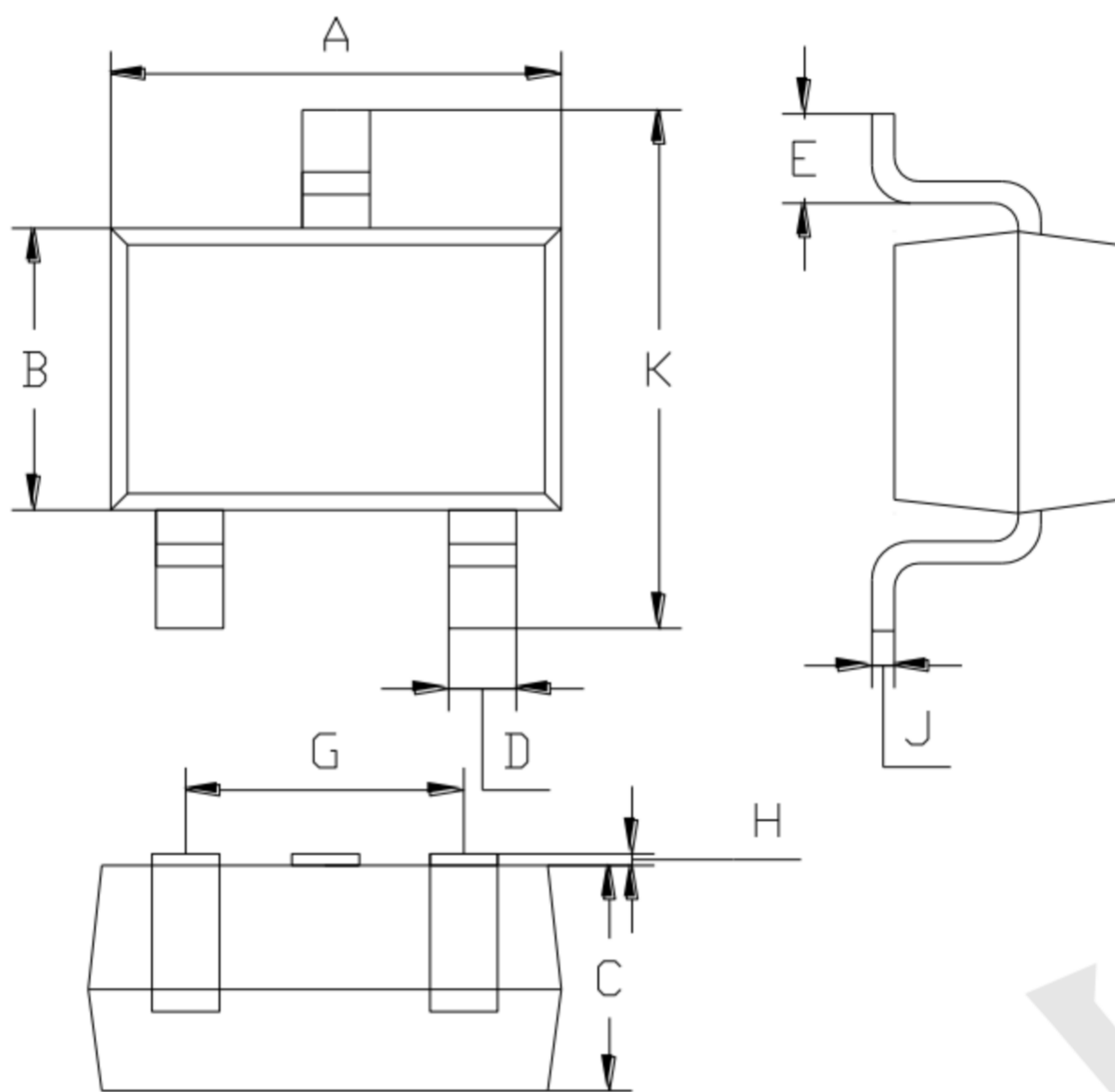
Electrical Characteristics ($T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward Voltage *1	V_F	$I_F=1\text{mA}$			0.38	V
		$I_F=40\text{mA}$			1	V
Reverse Leakage Current *2	I_R	$V_R=30\text{V}$			200	nA
Capacitance Between Terminals	C_T	$V_R=0\text{V}, f=1\text{MHz}$		2.5	5	pF
Reverse Recovery Time	t_{rr}	$I_F=I_R=10\text{mA}$ $I_{rr}=1.0\text{mA}, R_L=100\Omega$			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)

