

Features

- Small surface mounting type.
- Small package.
- Low forward voltage: $V_F=0.23V(\text{typ})$.

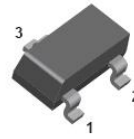
HF

Typical Applications

- For general purpose applications.

Mechanical Data

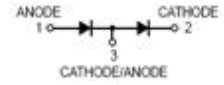
- Case: SOT-23 , SOT-323
- Molding compound, UL flammability classification rating 94V-0.
- Terminals: Tin plated leads, solderable per MIL-STD-202, Method 208.



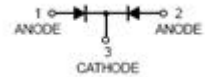
1SS374
SOT-23



1SS372
SOT-323



1SS378
SOT-323



Ordering Information

Part Number	Package	Shipping	Marking Code
1SS374	SOT-23	3000 pcs / Tape & Reel	N9
1SS372	SOT-323	3000 pcs / Tape & Reel	N9
1SS378	SOT-323	3000 pcs / Tape & Reel	N8

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

Parameter	Symbol	Value	Units
Maximum (Peak) Reverse Voltage	V_{RM}	15	V
Reverse Voltage	V_R	10	V
Average Forward Current	I_O	100	mA
Maximum (Peak) Forward Current	I_{FM}	200	mA
Surge Current (10ms)	I_{FSM}	1	A

Thermal Characteristics

Parameter	Symbol	1SS374	1SS372	1SS378	Units
Power Dissipation	P_D	150	100		mW
Typical Thermal Resistance per leg	$R_{\theta JA}^*$	667	1000		$^\circ\text{C}/\text{W}$
Junction Temperature	T_J		125		$^\circ\text{C}$
Storage Temperature Range	T_{STG}		-40 to +150		$^\circ\text{C}$

* Part mounted on FR-4 board with recommended pad layout

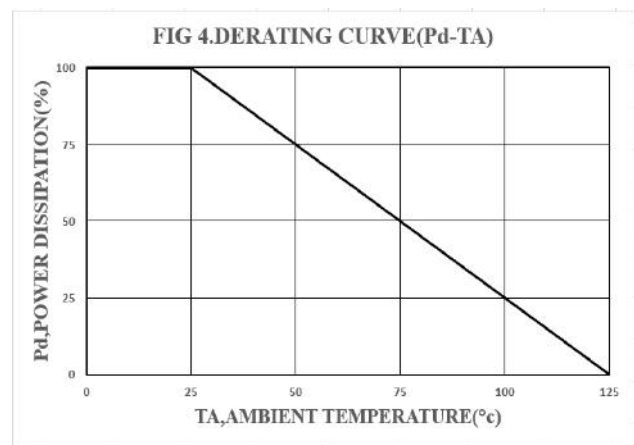
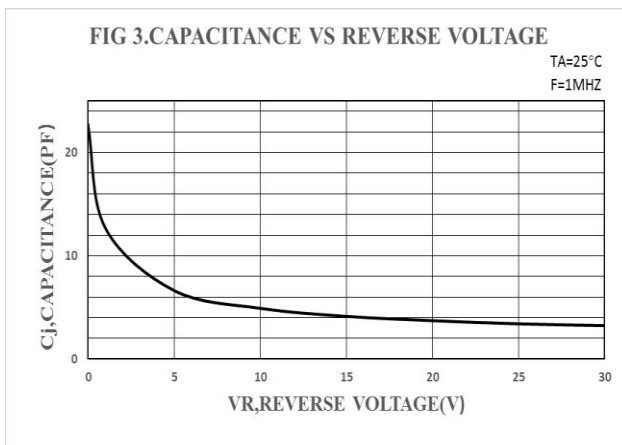
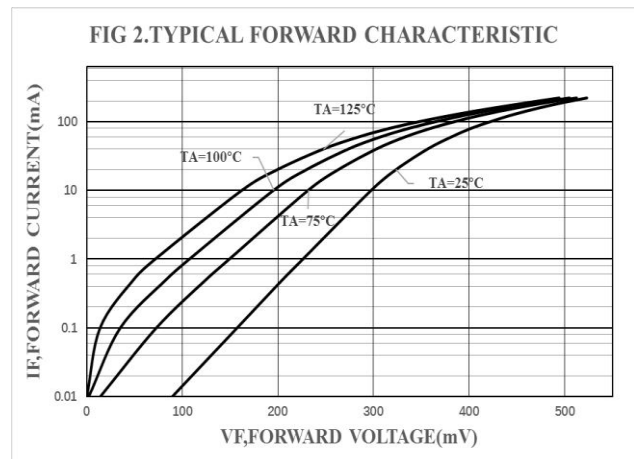
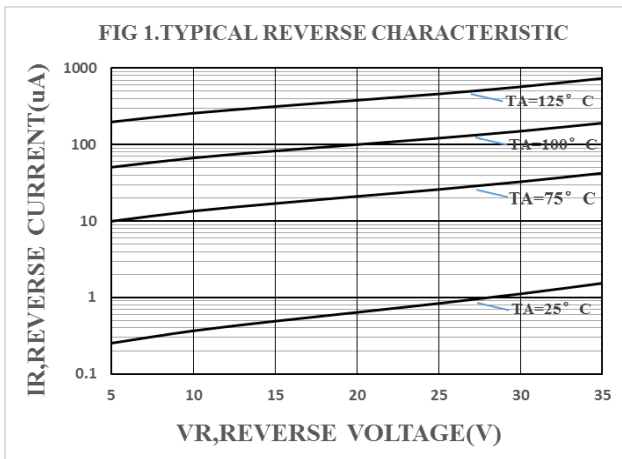
Electrical Characteristics (@ $T_A=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min.	Typ.	Max.	Units
Forward Voltage	V_F^*	$I_F=1\text{mA}$	-	0.18	-	V
		$I_F=5\text{mA}$	-	0.23	0.30	
		$I_F=100\text{mA}$	-	-	0.50	
Reverse Current	I_R^{**}	$V_R=10\text{V}$	-	-	20	μA
Capacitance Between Terminals	C_T	$V_R=0\text{V}, f=1\text{MHz}$	-	20	40	pF

*Pulse width $\leq 380\ \mu\text{s}$, Duty cycle $< 2\%$

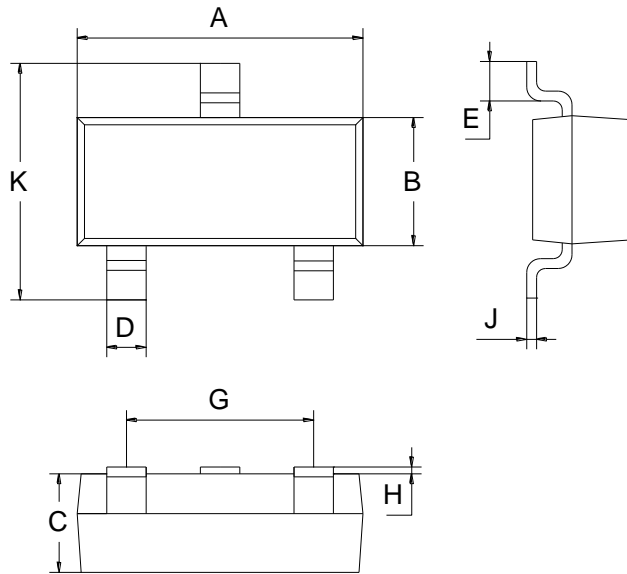
**pulse test , $t_p \leq 5\text{ms}$

Ratings and Characteristic Curves ($T_A=25^\circ\text{C}$ unless otherwise noted)



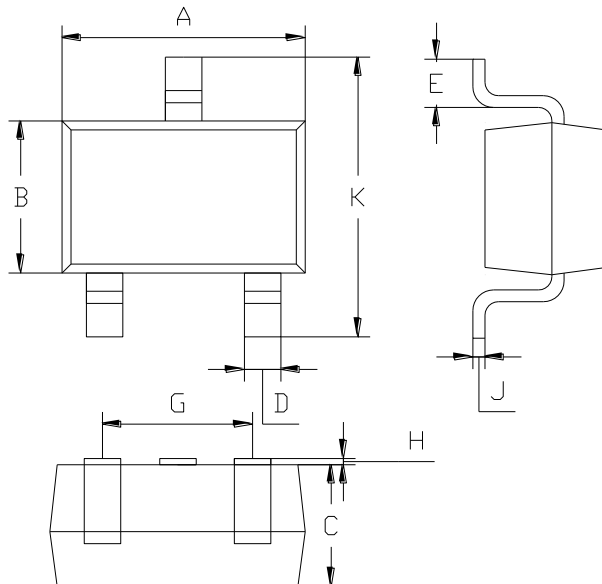
Package Outline Dimensions(unit:mm)

SOT-23



SOT-23		
Dim	Min	Max
A	2.70	3.10
B	1.10	1.50
C	0.90	1.10
D	0.30	0.50
E	0.35	0.48
G	1.80	2.00
H	0.02	0.10
J	0.05	0.15
K	2.20	2.60

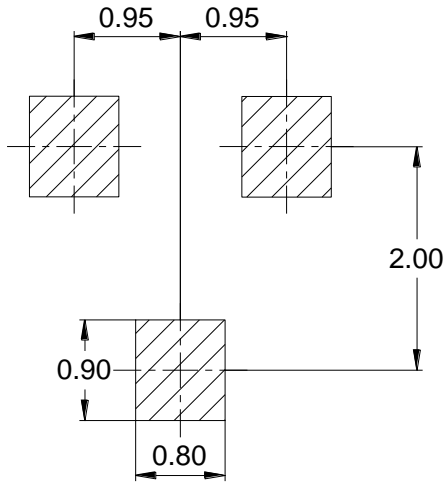
SOT-323



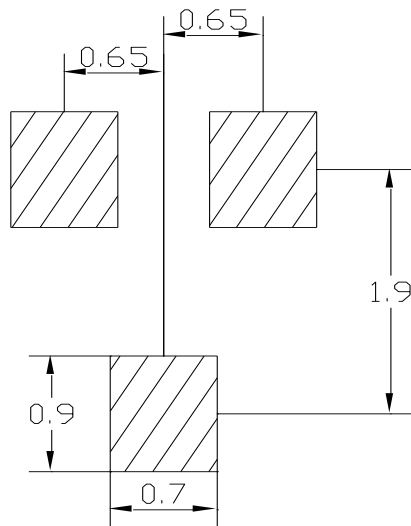
SOT-323		
Dim	Min	Max
A	2.00	2.20
B	1.15	1.35
C	0.90	1.10
D	0.15	0.35
E	0.25	0.40
G	1.20	1.40
H	0.02	0.10
J	0.05	0.15
K	2.20	2.40

Mounting Pad Layout(unit:mm)

SOT-23



SOT-323



IMPORTANT NOTICE

Galaxy Microelectronics (GME) reserves the right to make changes without further notice to any product herein to make corrections, modifications, improvements, or other changes. GME does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights, nor the rights of others.