

Features

- Low turn-on voltage
- Fast switching
- PN junction guard for transient and ESD protection
- Designed for surface mount application
- Plastic material-UL recognition flammability classification 94V-0



Lead-free



Typical Applications

- Surface mount fast switching diode

Mechanical Data

- Case: SOD-323
- Terminals: solderable per MIL-STD-202, Method 208.



SOD-323

Ordering Information

Part Number	Package	Shipping	Marking Code
BAS40WS□	SOD-323	3000/Tape&Reel	43

□: none is for Lead Free package;

“G” is for Halogen Free package.

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

Parameter	Symbol	Limits	Unit
Peak Repetitive reverse voltage	V_{RRM}		
Working peak reverse voltage	V_{RWM}	40	V
DC reverse voltage	V_R		
Forward Continuous Current *	I_F	200	mA
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	$^{\circ}C/W$
Operating Junction Temperature Range	T_j	-55 to +125	$^{\circ}C$
Storage Temperature Range	T_{STG}	-55 to +150	$^{\circ}C$

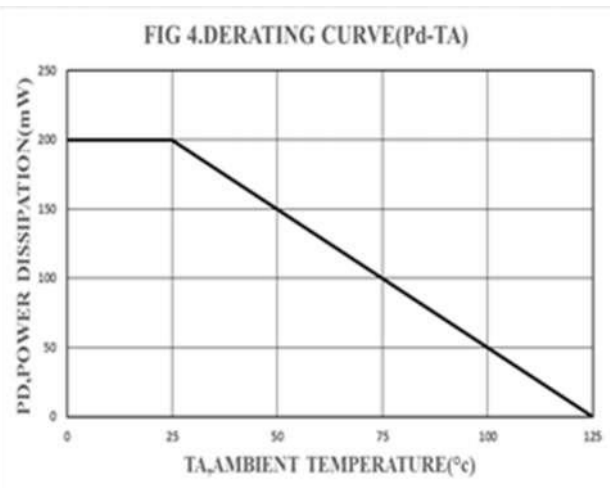
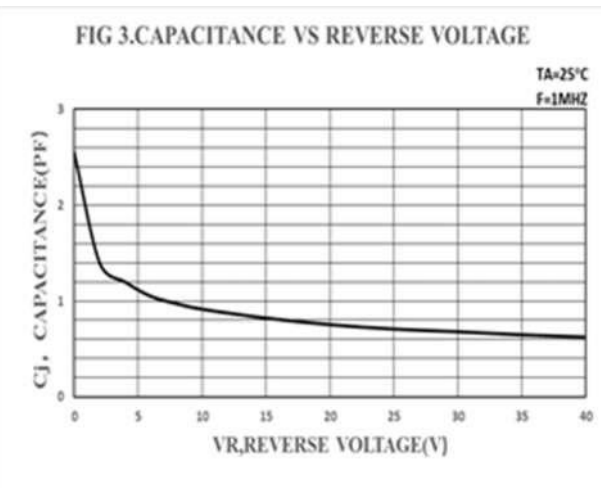
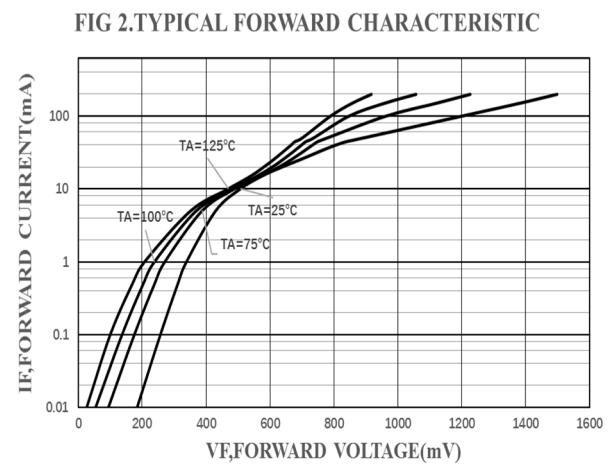
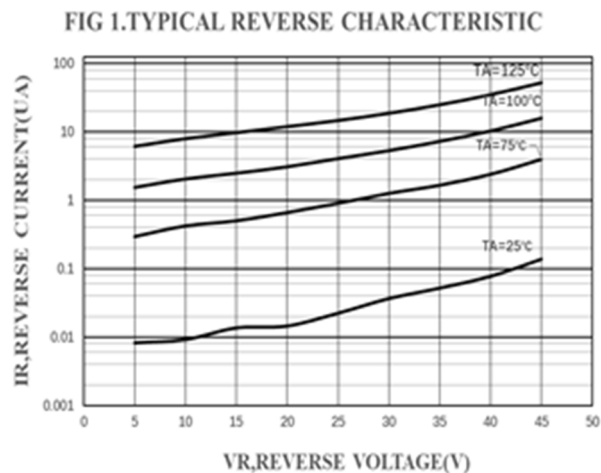
Electrical Characteristics (@ $T_A=25^{\circ}C$ unless otherwise specified)

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage *1	V_F	$I_F=1mA$			0.38	V
		$I_F=40mA$			1	V
Reverse current *2	I_R	$V_R=30V$			0.2	μA
Capacitance Between Terminals	C_T	$V_R=0V, f=1MHz$		2.5	5	pF
Reverse Recovery Time	t_{rr}	$I_F=I_R=10mA$ $I_{rr}=1.0mA, R_L=100\Omega$			5	ns

*1: pulse test, $t_p \leq 300\mu s$

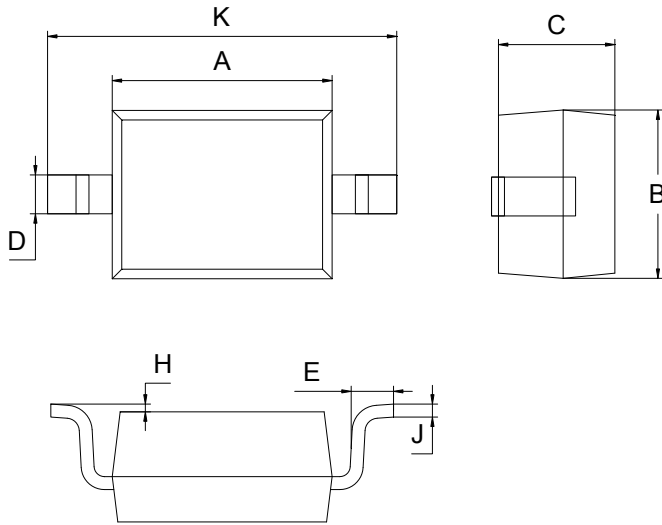
*2: pulse test, $t_p \leq 5ms$

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



Package Outline Dimensions(unit:mm)

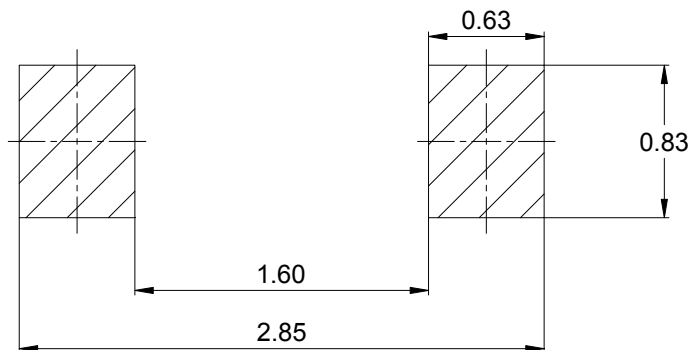
SOD-323



SOD-323		
Dim	Min	Max
A	1.60	1.80
B	1.20	1.40
C	0.80	0.90
D	0.25	0.35
E	0.22	0.42
H	0.02	0.10
J	0.05	0.15
K	2.55	2.75

Mounting Pad Layout(unit:mm)

SOD-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.