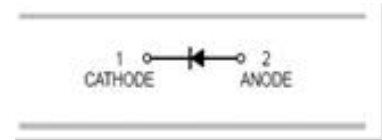


Features

- Low turn-on voltage
- Fast switching
- PN junction guard for transient and ESD protection

HF



Typical Applications

- High speed switching applications
- Circuit protecting
- Voltage clamping



SOD-523

Mechanical Data

- Case: SOD-523
- Terminals: solderable per MIL-STD-202, Method 208

Ordering Information

Part Number	Package	Shipping	Marking Code
BAS40X	SOD-523	3000pcs / Tape & Reel	43

Maximum Ratings (@T_A=25°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	150	mW

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

Thermal Characteristics

Parameter	Symbol	Limits	Unit
Thermal resistance junction to ambient air	$R_{\theta JA}$	667	$^{\circ}C/W$
Operating Junction Temperature Range	T_J	-55 to +125	$^{\circ}C$
Storage Temperature Range	T_{STG}	-55 to +150	$^{\circ}C$

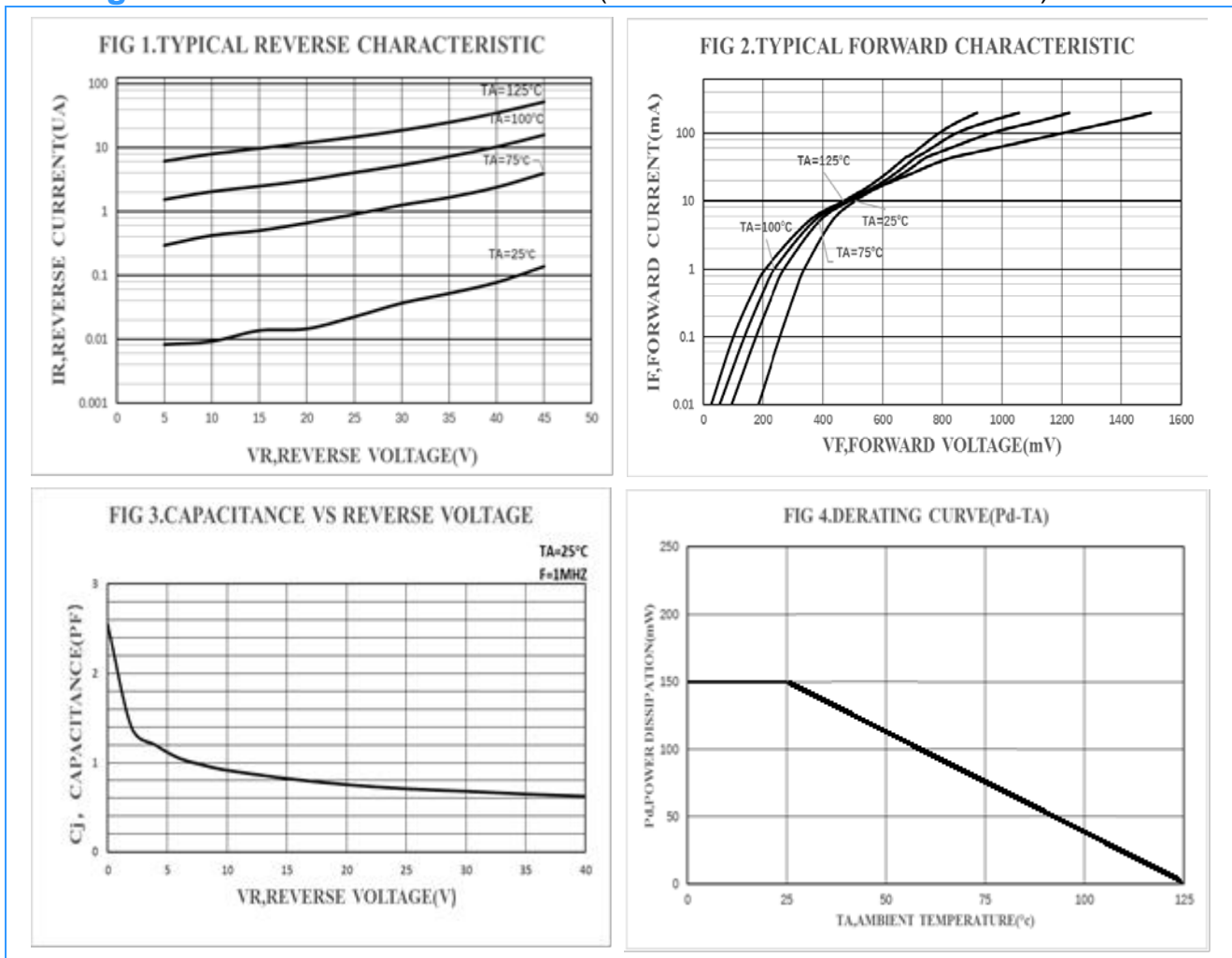
Electrical Characteristics (@ $T_A=25^{\circ}C$ unless otherwise specified)

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, $t_p \leq 300\mu s$

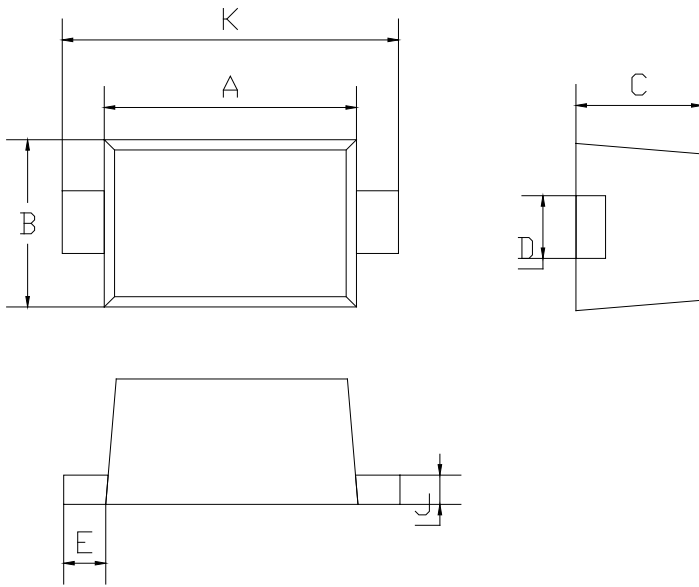
*2: pulse test, $t_p \leq 5ms$

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



Package Outline Dimensions (unit: mm)

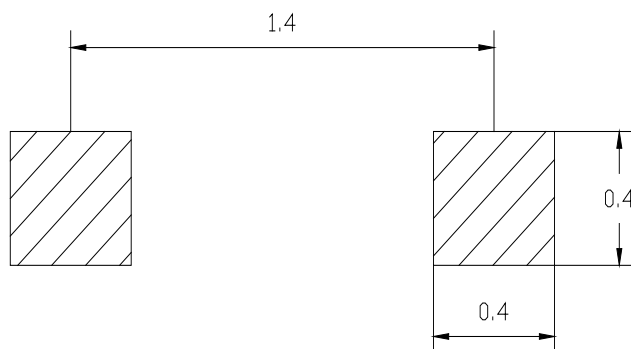
SOD-523



SOD-523		
Dim	Min	Max
A	1.10	1.30
B	0.70	0.90
C	0.50	0.70
D	0.25	0.35
E	0.15	0.25
J	0.05	0.15
K	1.50	1.70

Mounting Pad Layout (unit: mm)

SOD-523



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.