

Features

- Extremely fast switching
- Very low forward voltage

HF

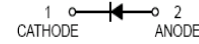
Mechanical Data

- Case: SOD-123, SOD-323
- Molding Compound: UL Flammability Classification Rating 94V-0
- Terminals: Matte tin-plated leads; solderability-per MIL-STD-202, Method 208



SOD-123

SOD-323



Ordering Information

Part Number	Package	Shipping Quantity	Marking Code
MBR0520	SOD-123	3000 pcs / Tape & Reel	R2
MBR0520S	SOD-323	3000 pcs / Tape & Reel	R2

Maximum Ratings (@ T_A = 25°C unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V _{RRM}	20	V
RMS Reverse Voltage	V _{RMS}	14	V
Maximum Average Forward Output Current	I _{F(AV)}	0.5	A
Peak Forward Surge Current (8.3ms single half sine-wave)	I _{FSM}	10	A

Thermal Characteristics

Parameter	Symbol	MBR0520	MBR0520S	Unit
Power Dissipation	P _D	500	250	mW
Operating junction Temperature	T _J	150		°C
Storage Temperature Range	T _{STG}	-55 ~ +150		°C

Electrical Characteristics (@ T_A = 25°C unless otherwise specified)

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Forward Voltage	V _F	I _F = 0.1A	-	-	0.375	V
		I _F = 0.5A	-	-	0.44	
Maximum Peak Reverse Current	I _R	V _R = 20V	-	-	20	μA

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

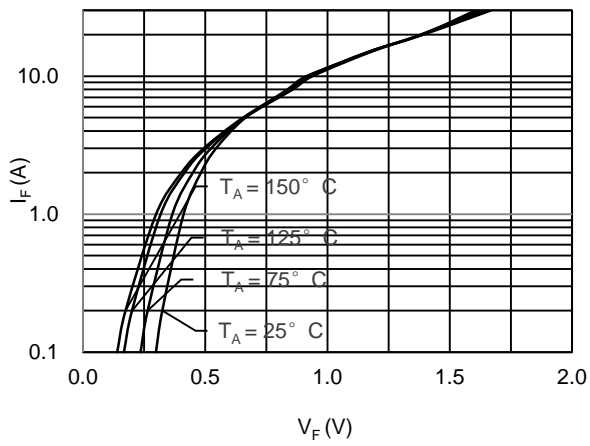


Fig. 1 Forward Characteristics

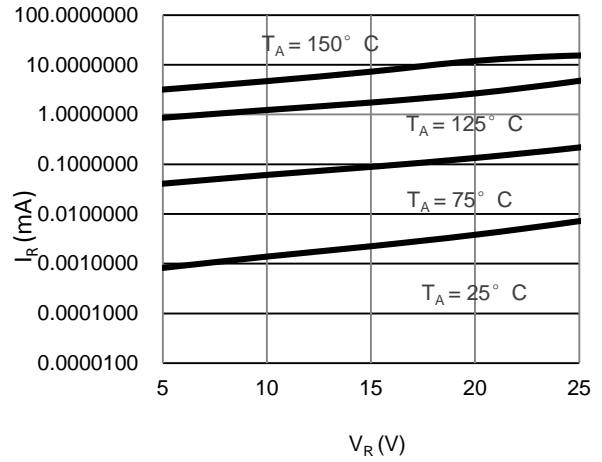
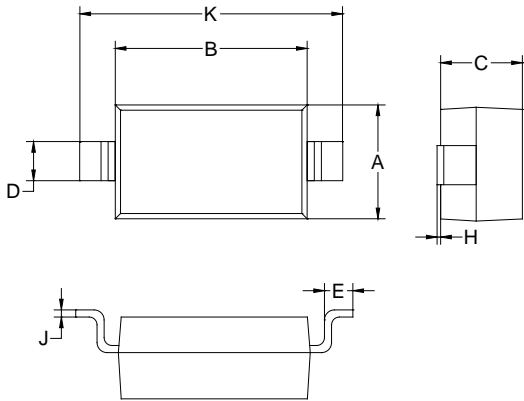
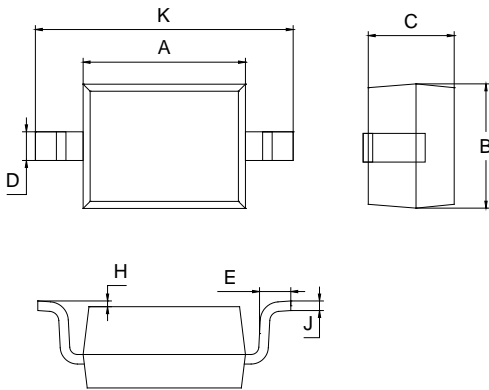


Fig. 2 Typical Reverse Characteristic

Package Outline Dimensions (Unit: mm)



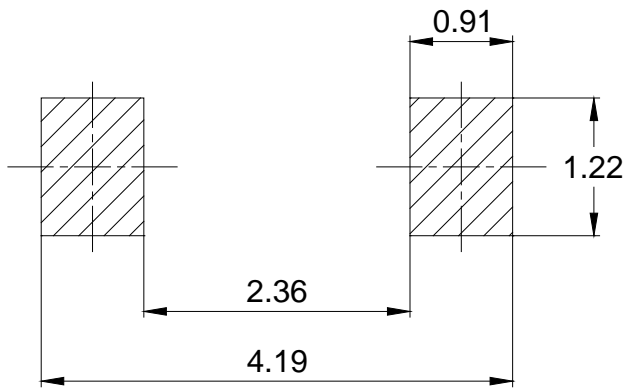
SOD-123		
Dimension	Min.	Max.
A	1.45	1.75
B	2.55	2.85
C	1.00	1.30
D	0.50	0.60
E	0.25	0.45
H	0.02	0.10
J	0.05	0.15
K	3.55	3.85



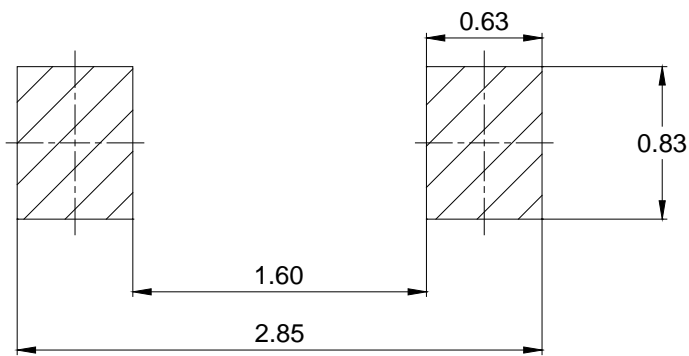
SOD-323		
Dimension	Min.	Max.
A	1.60	1.80
B	1.20	1.40
C	0.80	0.90
D	0.25	0.35
E	0.22	0.42
H	0.02	0.10
J	0.05	0.15
K	2.55	2.75

Mounting Pad Layout (Unit: mm)

SOD-123



SOD-323



Important Notice

Changzhou Galaxy Century Microelectronics (GME) reserves the right to make changes without further notice to any product information (copyrighted) 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.