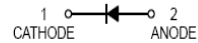


Features

- Extremely fast switching
- Very low forward voltage



Mechanical Data

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



SOD-123

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)

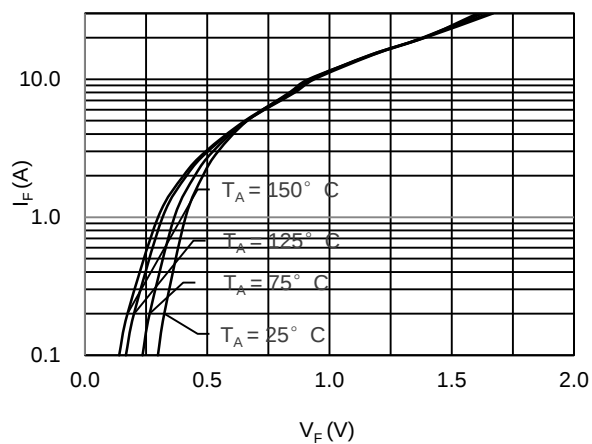


Fig. 1 Forward Characteristics

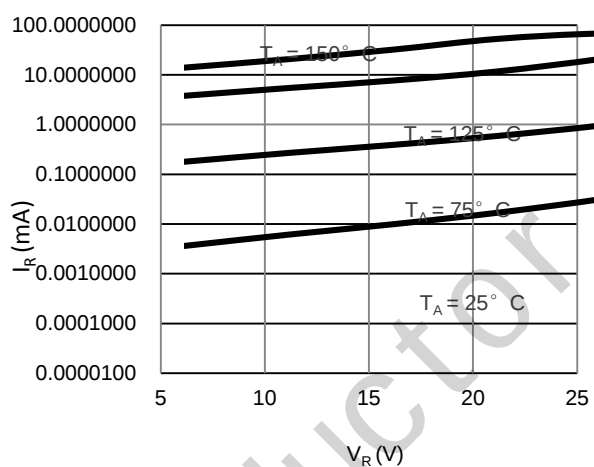
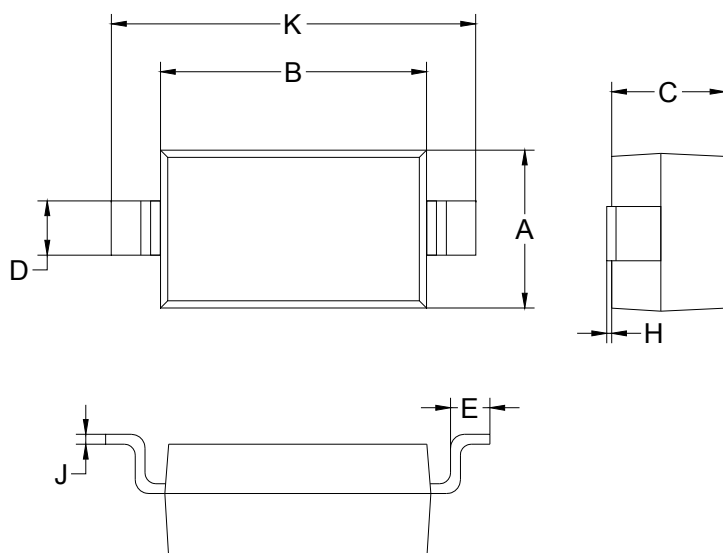


Fig. 2 Typical Reverse Characteristic

PACKAGE OUTLINE

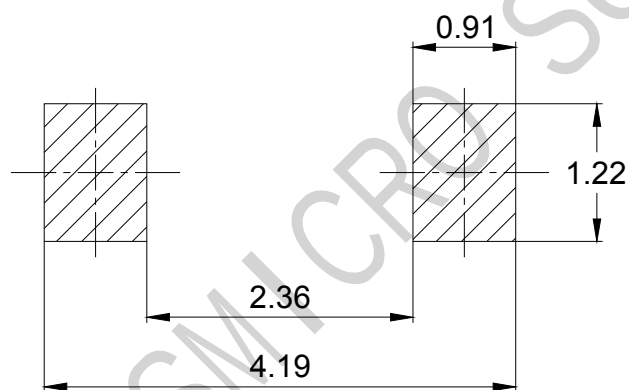
Plastic surface mounted package

SOD-123



SOD-123		
Dim	Min	Max
A	1.45	1.75
B	2.55	2.85
C	1.15 Typical	
D	0.55 Typical	
E	0.25	0.45
H	0.02	0.10
J	0.1 Typical	
K	3.55	3.85
All Dimensions in mm		

SOLDERING FOOTPRINT



Unit: mm