



HBAW56

HIGH-CONDUCTANCE ULTRA DIODE

Description

The HBAW56 consists of two high-speed switching diodes with common anodes, fabricated in planar technology, and encapsulated in the small plastic SMD SOT23 package.

Features

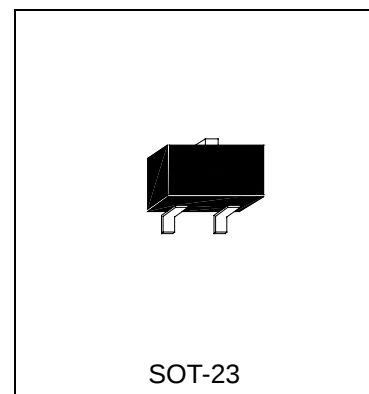
- Small SMD Package (SOT-23)
- Ultra-high Speed
- Low Forward Voltage
- Fast Reverse Recovery Time

Absolute Maximum Ratings

- Maximum Temperatures
Storage Temperature -65 ~ +150 °C
Junction Temperature +150 °C
- Maximum Power Dissipation
Total Power Dissipation (Ta=25°C) 250 mW
- Maximum Voltages and Currents (Ta=25°C)
Reverse Voltage 85 V
Repetitive Reverse Voltage 75 V
Forward Current 215 mA
Repetitive Forward Current 125 mA
Forward Surge Current (1ms)..... 450 mA

Characteristics (Ta=25°C)

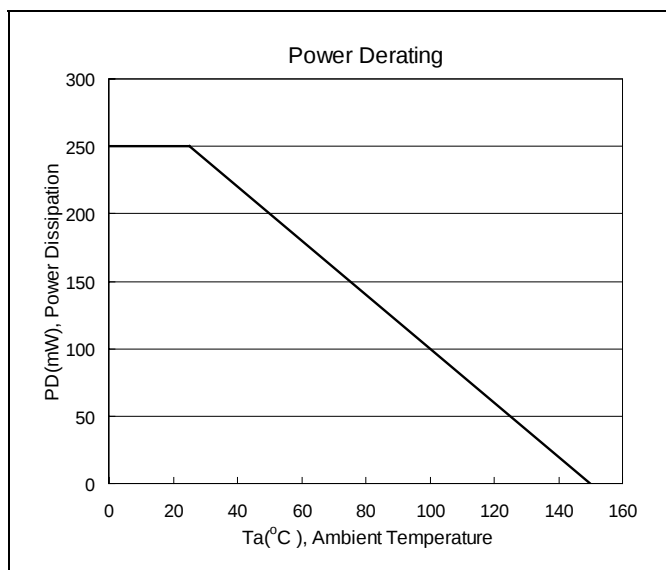
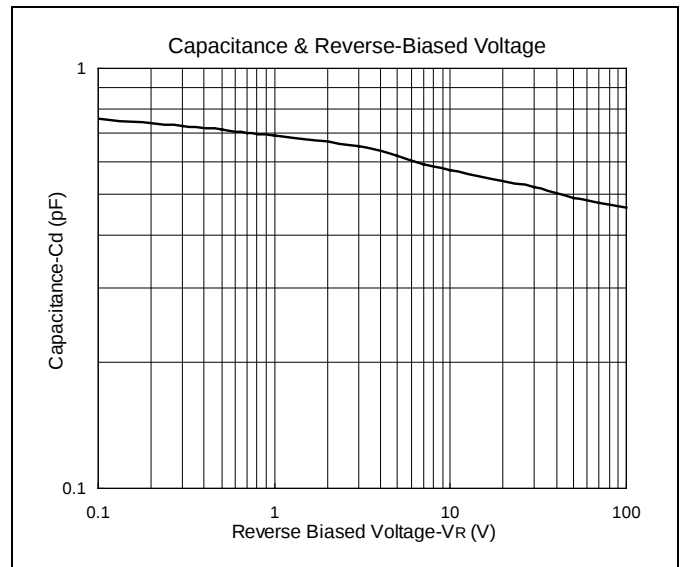
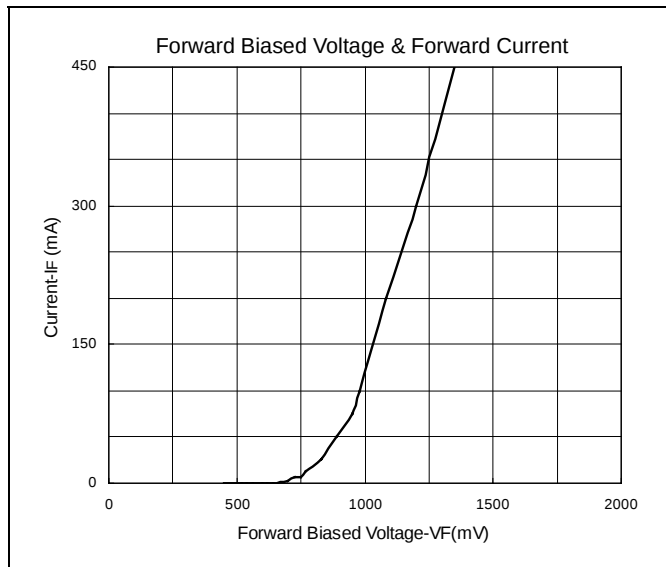
Characteristic	Symbol	Condition	Min	Max	Unit
Forward Voltage	VF(1)	IF=1mA	-	715	mV
	VF(2)	IF=10mA	-	855	mV
	VF(3)	IF=50mA	-	1000	mV
	VF(4)	IF=150mA	-	1250	mV
Reverse Current	IR	VR=75V	-	1	uA
Total Capacitance	CT	VR=0, f=1MHz	-	2	pF
Reverse Recovery Time	Trr	IF=IR=10mA, RL=100Ω measured at IR=1mA	-	4	nS



SOT-23

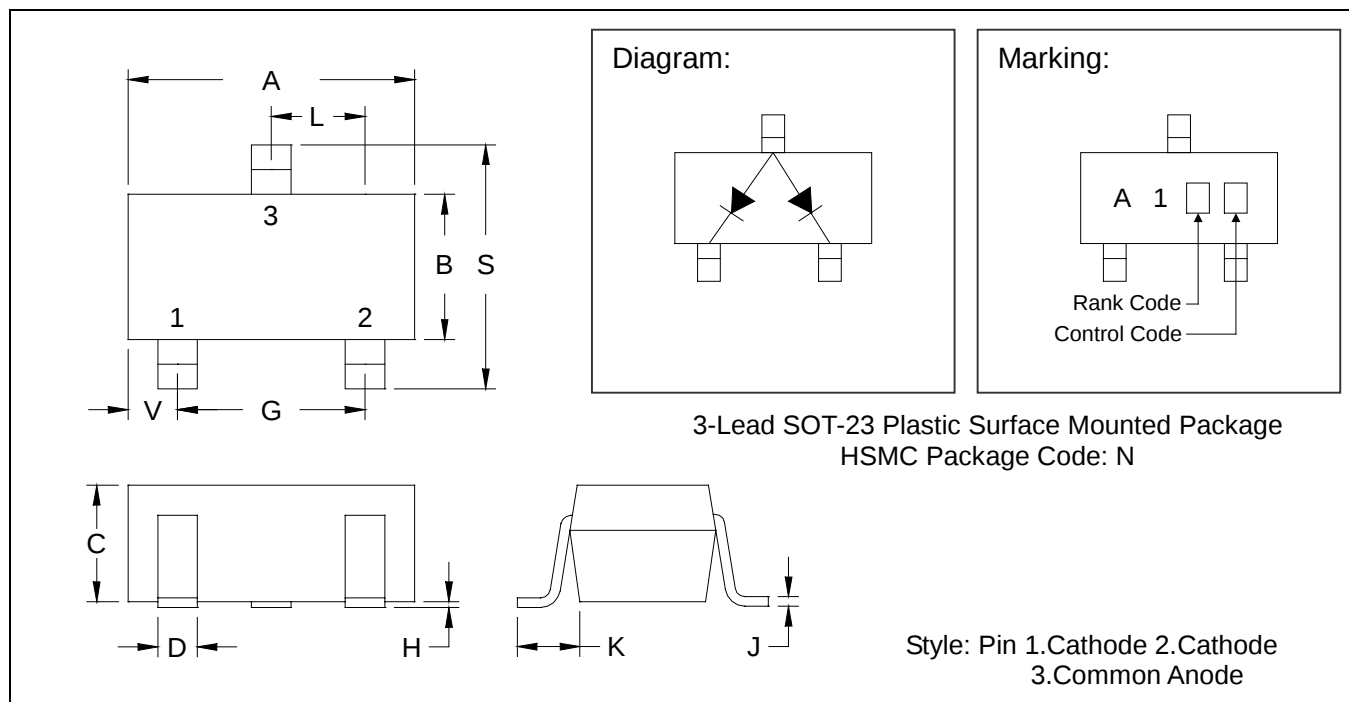


Characteristics Curve





SOT-23 Dimension



*: Typical

DIM	Inches		Millimeters		DIM	Inches		Millimeters	
	Min.	Max.	Min.	Max.		Min.	Max.	Min.	Max.
A	0.1102	0.1204	2.80	3.04	J	0.0034	0.0070	0.085	0.177
B	0.0472	0.0630	1.20	1.60	K	0.0128	0.0266	0.32	0.67
C	0.0335	0.0512	0.89	1.30	L	0.0335	0.0453	0.85	1.15
D	0.0118	0.0197	0.30	0.50	S	0.0830	0.1083	2.10	2.75
G	0.0669	0.0910	1.70	2.30	V	0.0098	0.0256	0.25	0.65
H	0.0005	0.0040	0.013	0.10					

Notes: 1.Dimension and tolerance based on our Spec. dated Sep. 07,1997.

2.Controlling dimension: millimeters.

3.Maximum lead thickness includes lead finish thickness, and minimum lead thickness is the minimum thickness of base material.

4.If there is any question with packing specification or packing method, please contact your local HSMC sales office.

Material:

- Lead: 42 Alloy; solder plating
- Mold Compound: Epoxy resin family, flammability solid burning class: UL94V-0

Important Notice:

- All rights are reserved. Reproduction in whole or in part is prohibited without the prior written approval of HSMC.
- HSMC reserves the right to make changes to its products without notice.
- **HSMC semiconductor products are not warranted to be suitable for use in Life-Support Applications, or systems.**
- HSMC assumes no liability for any consequence of customer product design, infringement of patents, or application assistance.

Head Office And Factory:

- **Head Office** (Hi-Sincerity Microelectronics Corp.): 10F.,No. 61, Sec. 2, Chung-Shan N. Rd. Taipei Taiwan R.O.C.
Tel: 886-2-25212056 Fax: 886-2-25632712, 25368454
- **Factory 1:** No. 38, Kuang Fu S. Rd., Fu-Kou Hsin-Chu Industrial Park Hsin-Chu Taiwan. R.O.C
Tel: 886-3-5983621~5 Fax: 886-3-5982931