



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

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$V_{RM}$	100	V
$I_{FM}$	500	mA
$I_F$	215	mA
$I_{FSM}$	4000	mA

● Features

- High reliability
- Small mold type

● Application

- General switching

● Structure

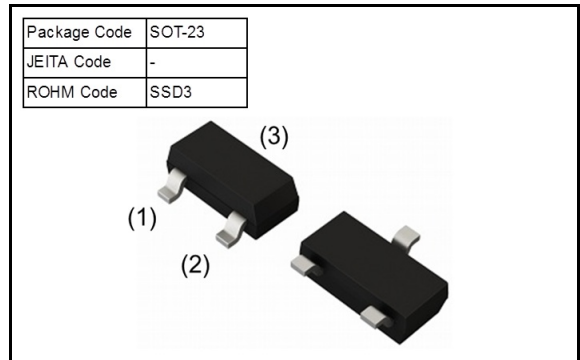
- Epitaxial planar

● Absolute Maximum Ratings ( $T_a = 25^\circ\text{C}$ )

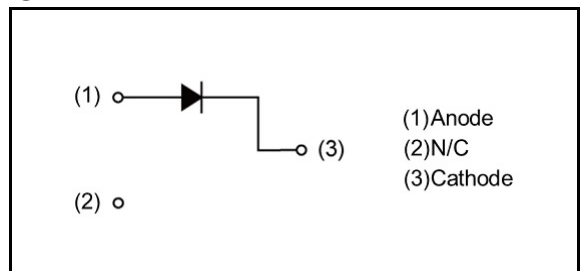
Parameter	Symbol	Conditions	Limits	Unit
Repetitive peak reverse voltage	$V_{RM}$	-	100	V
Reverse voltage	$V_R$	-	80	V
Power dissipation	$P_D$	$T_a \leq 25^\circ\text{C}$	250	mW
Repetitive peak reverse forward current	$I_{FM}$	-	500	mA
Peak forward surge current	$I_{FSM}$	$t=1\mu\text{s}$	4000	mA
Forward current	$I_F$	-	215	mA
Junction temperature	$T_j$	-	150	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-	-65 ~ 150	$^\circ\text{C}$

※Caution: static electricity

● Outline



● Inner Circuit



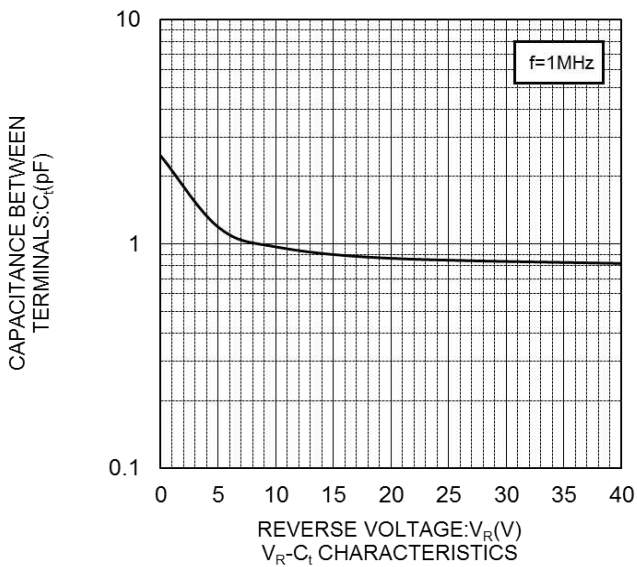
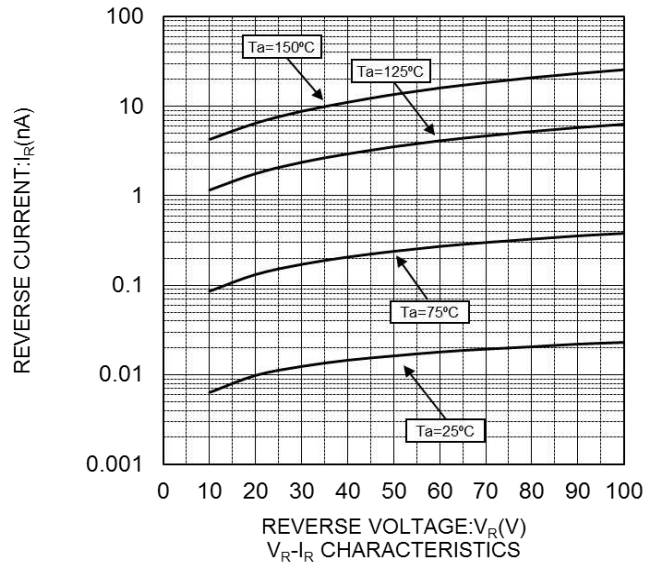
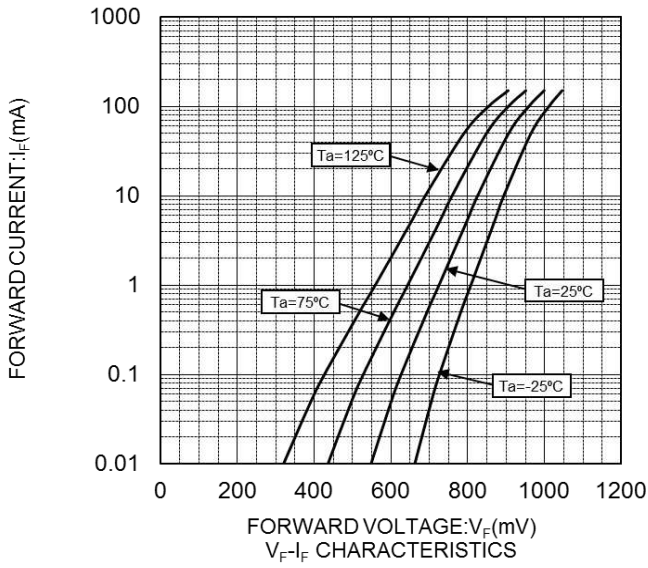
● Packaging Specifications

Packing	Embossed Tape
Reel Size(mm)	180
Taping Width(mm)	8
Basic Ordering Unit(pcs)	3000
Taping Code	T116
Marking	D8X

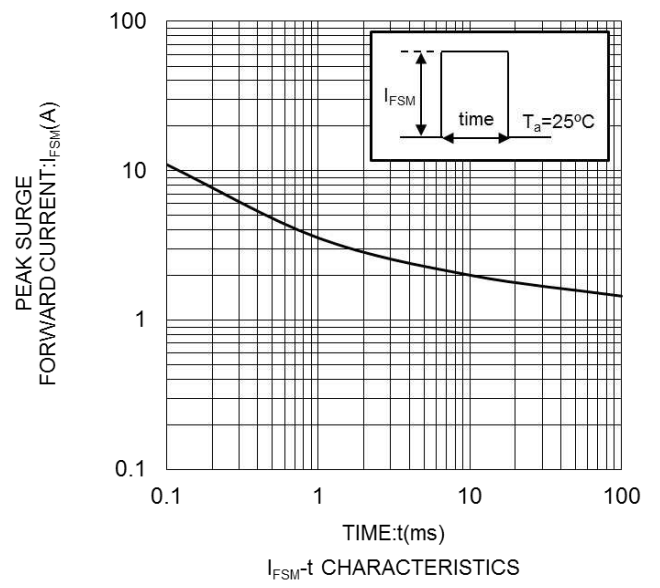
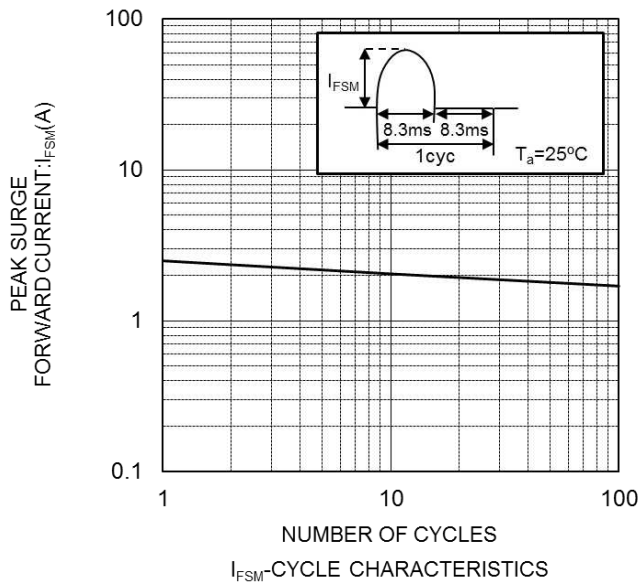
● Characteristics (T<sub>a</sub> = 25°C)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward voltage	V <sub>F</sub>	I <sub>F</sub> =1mA	-	-	0.90	V
		I <sub>F</sub> =10mA	-	-	1.00	V
		I <sub>F</sub> =50mA	-	-	1.10	V
		I <sub>F</sub> =150mA	-	-	1.25	V
Reverse current	I <sub>R</sub>	V <sub>R</sub> =75V T <sub>j</sub> =25°C	-	-	5.0	nA
		V <sub>R</sub> =75V T <sub>j</sub> =150°C	-	-	80	nA
		-	-	-	-	A
Capacitance between terminals	C <sub>t</sub>	V <sub>R</sub> =0V f=1.0MHz	-	-	4.0	pF
Reverse recovery time	t <sub>rr</sub>	I <sub>F</sub> =I <sub>R</sub> =10mA R <sub>L</sub> =100Ω I <sub>rr</sub> =1mA	-	-	3.0	μs

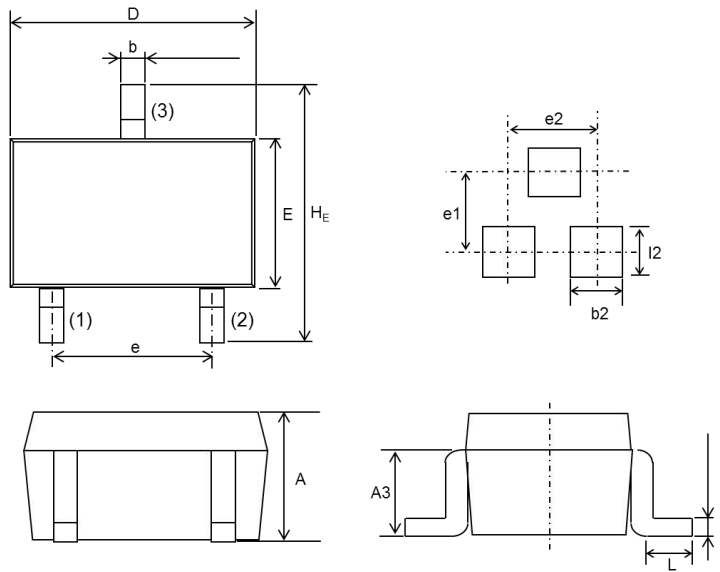
● Characteristic Curves



● Characteristic Curves

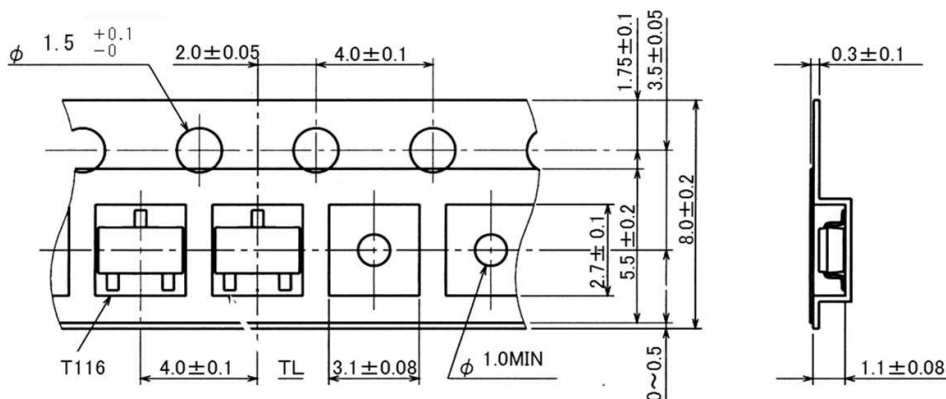


● Dimensions (SOT-23 SSD3)



DIM	Millimeters			Inches		
	Min.	Average	Max.	Min.	Average	Max.
A	0.85	0.95	1.15	0.033	0.037	0.045
A3	0.35	0.45	0.55	0.014	0.018	0.022
b	0.35	0.40	0.50	0.014	0.016	0.020
c	0.09	0.15	0.25	0.004	0.006	0.010
D	2.70	2.90	3.10	0.106	0.114	0.122
E	1.20	1.30	1.50	0.047	0.051	0.059
HE	2.20	2.40	2.60	0.087	0.094	0.102
L	0.20	-	-	0.008	-	-
e	1.70	1.90	2.10	0.067	0.075	0.083
l2	1.00	-	-	0.039	-	-
b2	0.80	-	-	0.031	-	-
e1	-	2.10	-	-	0.083	-
e2	-	1.90	-	-	0.075	-

● Taping (Unit:mm)





BAS116HMFH - Web Page

Part Number	BAS116HMFH
Package	SOT-23
Unit Quantity	3000
Minimum Package Quantity	3000
Packing Type	Taping
Constitution Materials List	inquiry
RoHS	Yes