

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

● Features

- High reliability
- Small mold type

● Application

- General switching

● Structure

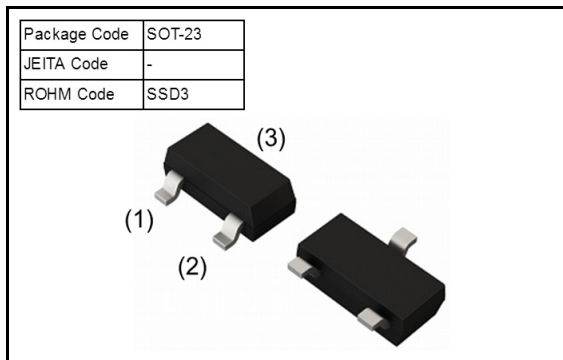
- Epitaxial planar

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

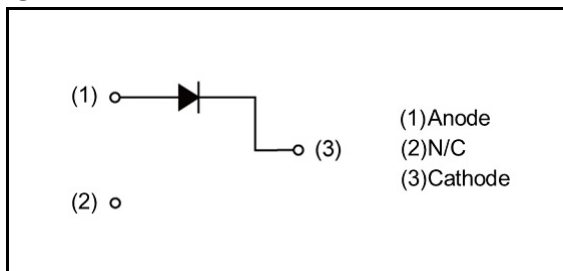
Parameter	Symbol	Conditions	Limits	Unit
Repetitive peak reverse voltage	$V_{RM}$	-	100	V
Reverse voltage	$V_R$	-	80	V
Power dissipation	$P_D$	$T_a \leq 25^\circ\text{C}$	250	mW
Repetitive peak reverse forward current	$I_{FM}$	-	500	mA
Peak forward surge current	$I_{FSM}$	$t=1\mu\text{s}$	4000	mA
Forward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



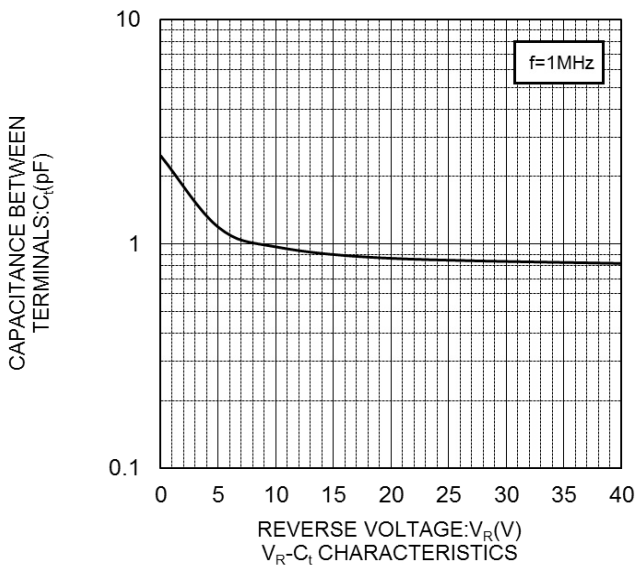
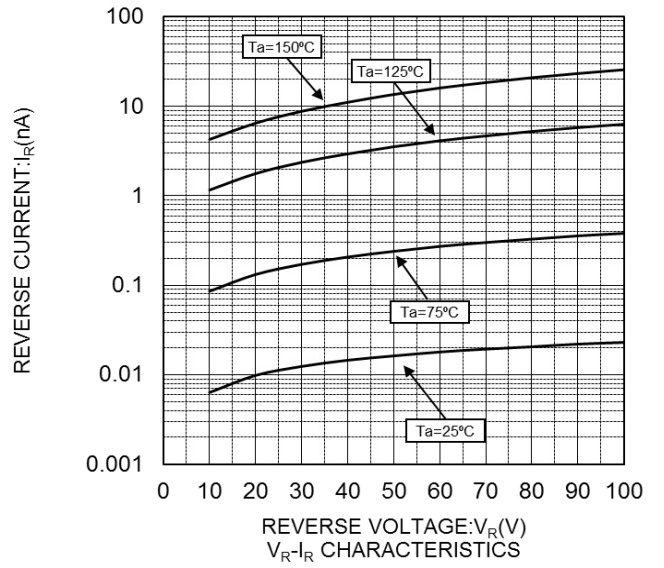
● Packaging Specifications

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

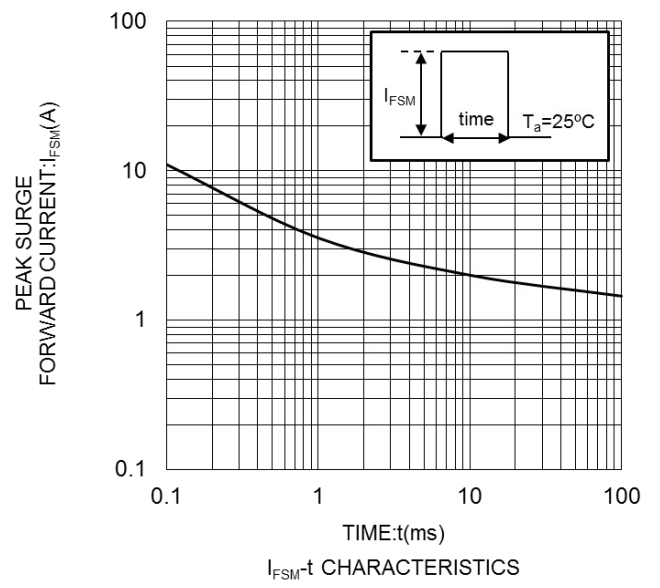
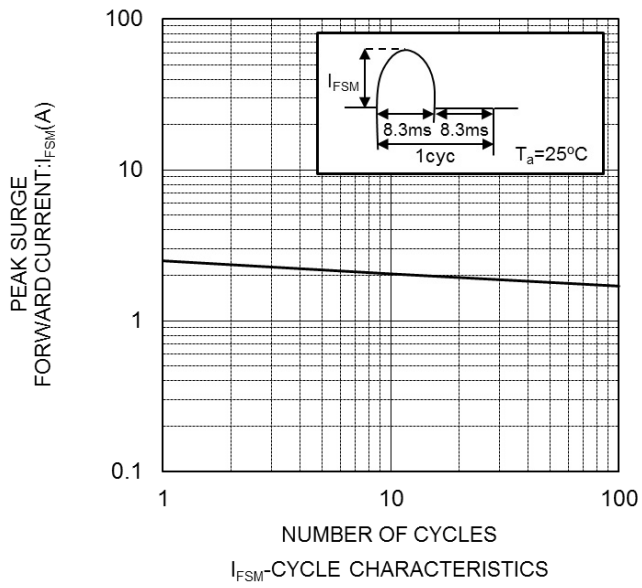
● Characteristics (T<sub>a</sub> = 25°C)

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