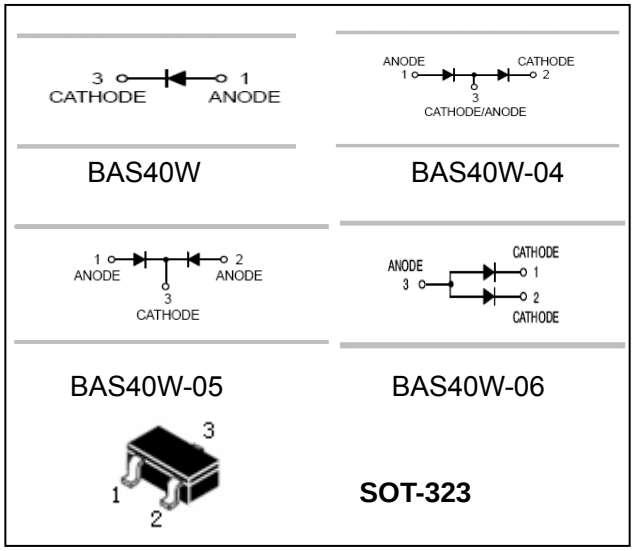
Surface Mount Schottky Barrier Diode **BAS40W/-04/-05/-06**

FEATURES

- Low Forward voltage drop.
- Fast switching.
- Ultra-small surface mount package.
- PN junction guard ring for transient and ESD protection.

Lead-free



APPLICATIONS

- For general purpose switching applications.

ORDERING INFORMATION

Type No.	Marking	Package Code
BAS40W	43	SOT-323
BAS40W-04	44	SOT-323
BAS40W-05	45	SOT-323
BAS40W-06	46	SOT-323

MAXIMUM RATING @ Ta=25℃ unless otherwise specified

Parameter	**Symbol**	**Limits**	**Unit**
RMS Reverse voltage	$V_{R(RMS)}$	28	V
Repetitive Peak reverse voltage Working peak reverse voltage Diode reverse voltage	V_{RRM} V_{RWM} V_R	40	V
Forward continuous Current	I_F	200	mA
Non-Repetitive peak forward surge Current @t=1μs	I_{FS}	600	mA
Power Dissipation	P_d	200	mW
Junction temperature	T_j	150	℃
Storage temperature range	T_{stg}	-65 to +150	℃

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ELECTRICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Reverse breakdown voltage	$V_{(BR)R}$	I_R= 10μA	40		V
Reverse voltage leakage current	I_R	V_R=30V		200	nA
Forward voltage	V_F	I_F=1.0mA I_F=40mA		380 1000	mV
Diode capacitance	C_D	V_R=0V f=1MHz		5	pF
Reverse recovery time	t_{rr}	I_F=I_R=10mA R_L=100Ω		5	nS

TYPICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

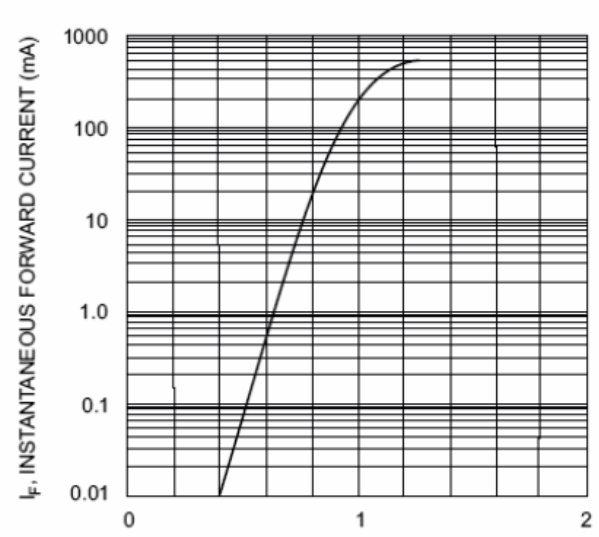

Fig. 1 Forward Characteristics

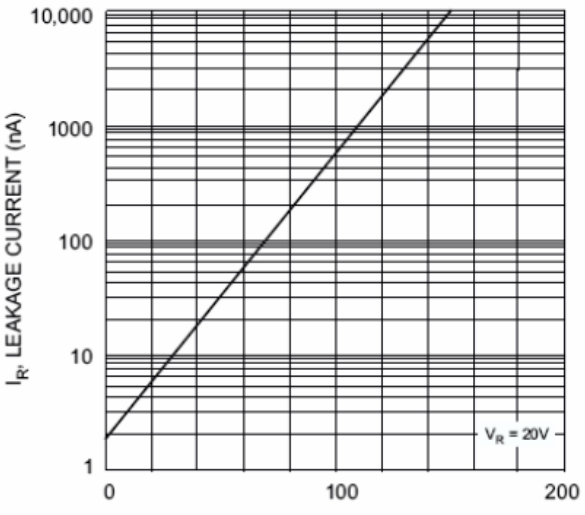

Fig. 2 Leakage Current vs Junction Temperature

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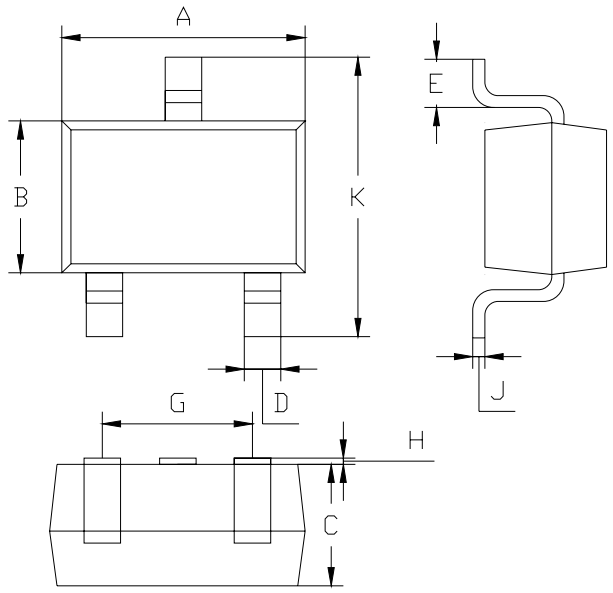
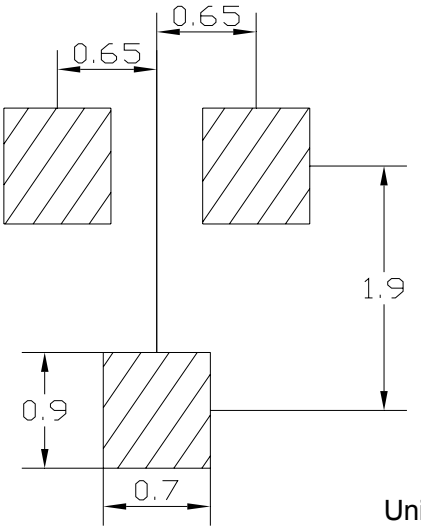
PACKAGE OUTLINE

Plastic surface mounted package SOT-323



SOT-323		
Dim	Min	Max
A	1.8	2.2
B	1.15	1.35
C	1.0Typical	
D	0.15	0.35
E	0.25	0.40
G	1.2	1.4
H	0.02	0.1
J	0.1Typical	
K	2.2	2.4
All Dimensions in mm		

SOLDERING FOOTPRINT



Unit : mm

PACKAGE INFORMATION

Device	Package	Shipping
BAS40W/-04/-05/-06	SOT-323	3000/Tape&Reel