

Surface Mount Schottky Barrier Diode

BAS40W/-04/-05/-06

FEATURES

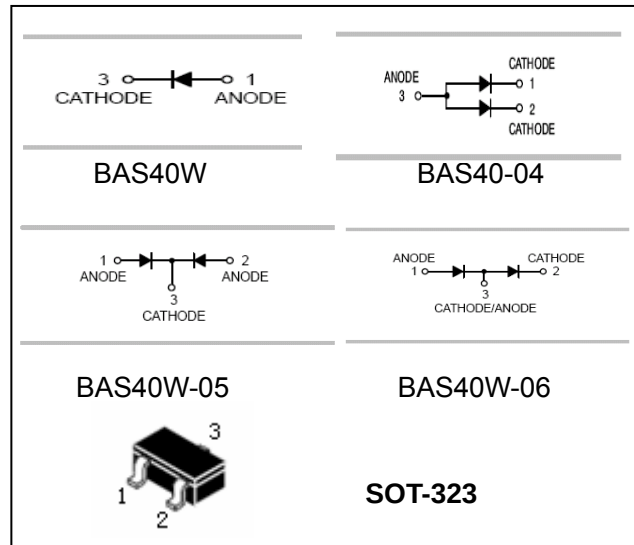
- Low Forward voltage drop.
- Fast switching.
- Ultra-small surface mount package.
- PN junction guard ring for transient and ESD protection.



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°C unless otherwise specified

Parameter	Symbol	Limits	Unit
RMS Reverse voltage	$V_{R(RMS)}$	28	V
Repetitive Peak reverse voltage	V_{RRM}	40	V
Working peak reverse voltage	V_{RWM}		
Diode reverse voltage	V_R		
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	°C
Storage temperature range	T_{stg}	-65-+150	°C

Surface Mount Schottky Barrier Diode**BAS40W/-04/-05/-06****ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified**

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Reverse breakdown voltage	$V_{(BR)R}$	$I_R = 10\mu A$	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}	$I_F = I_R = 10mA$ $R_L = 100\Omega$		5	nS

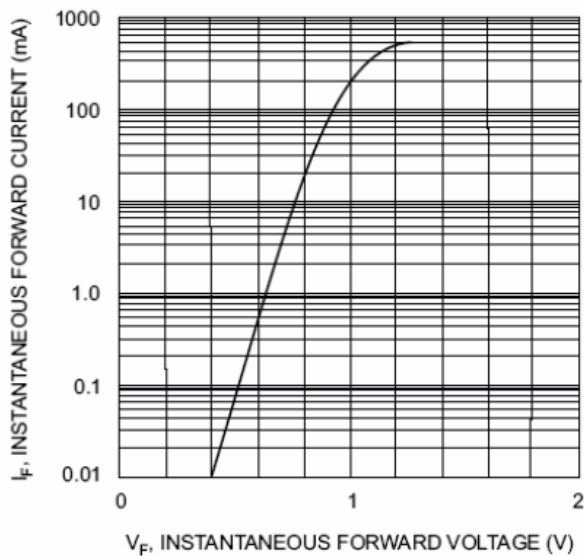
TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Fig. 1 Forward Characteristics

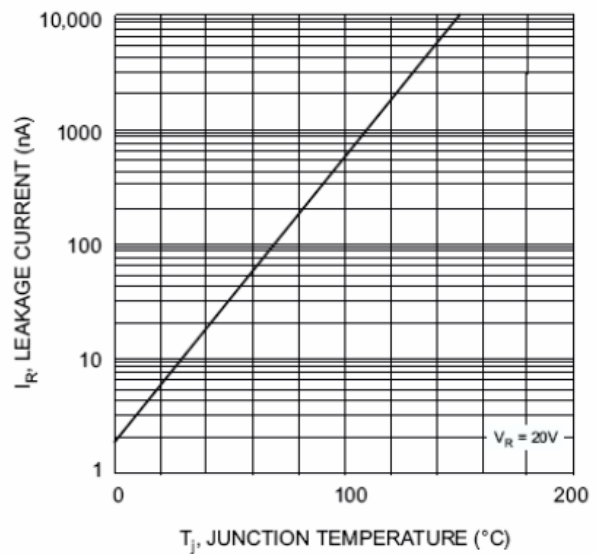


Fig. 2 Leakage Current vs Junction Temperature

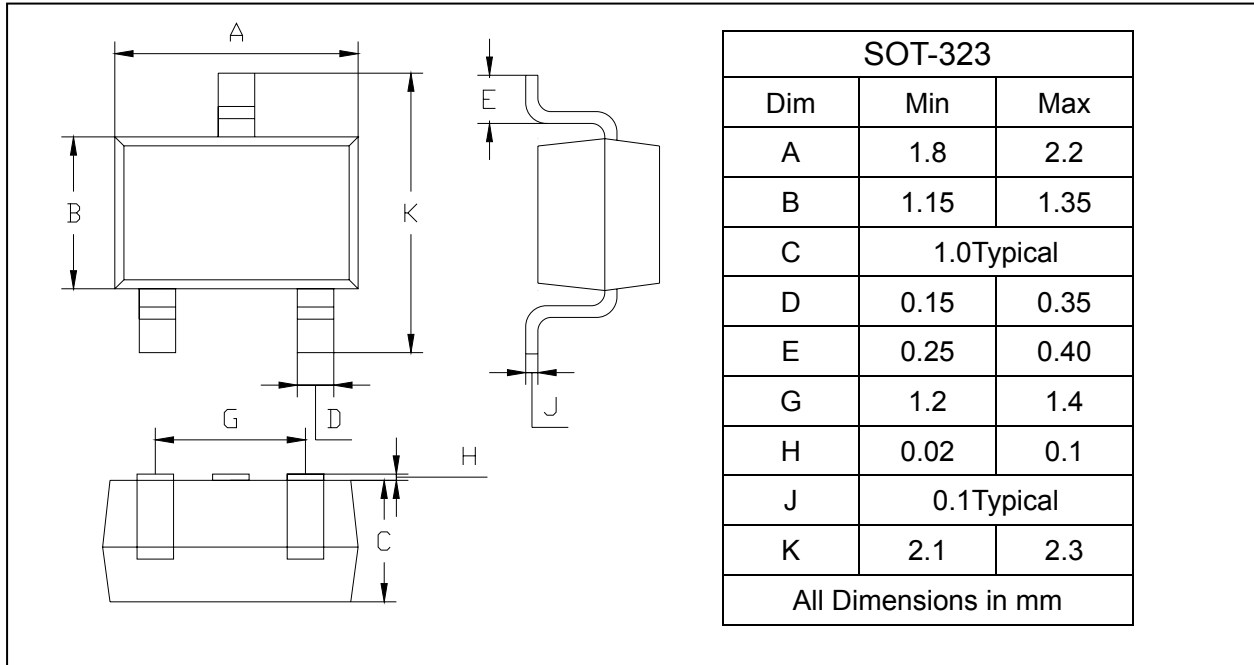
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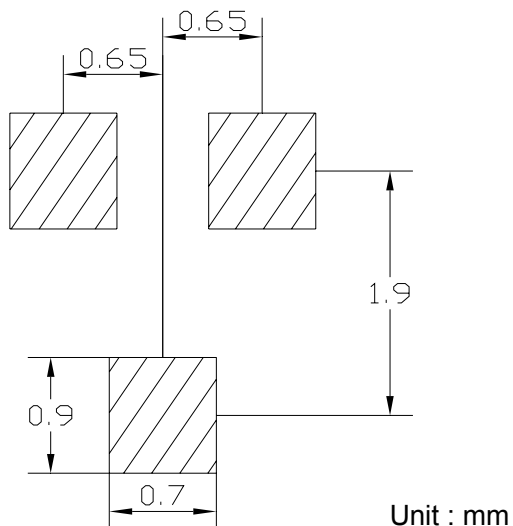
PACKAGE OUTLINE

Plastic surface mounted package

SOT-323



SOLDERING FOOTPRINT



PACKAGE INFORMATION

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