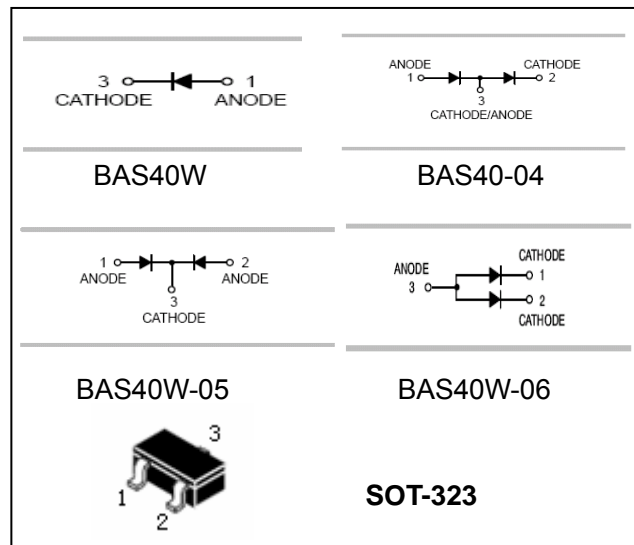


## Surface Mount Schottky Barrier Diode **BAS40W/-04/-05/-06**

### FEATURES

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



### 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 to +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**

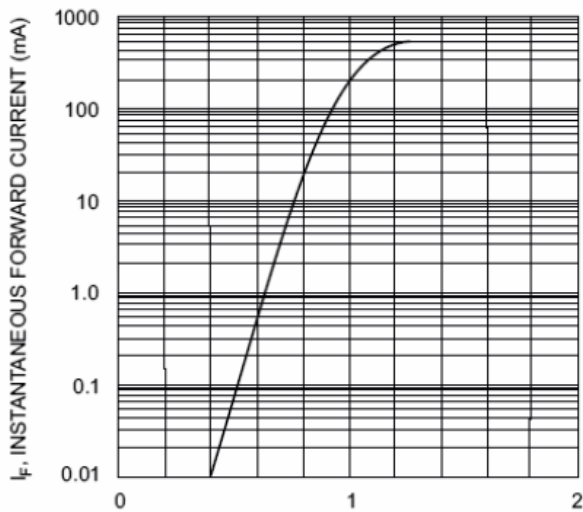


Fig. 1 Forward Characteristics

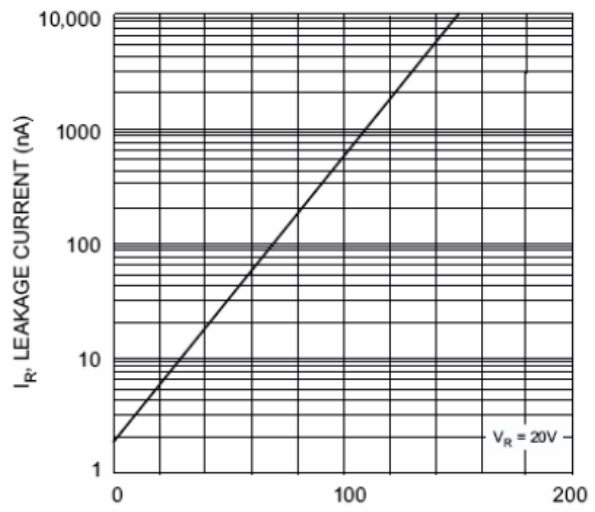


Fig. 2 Leakage Current vs Junction Temperature



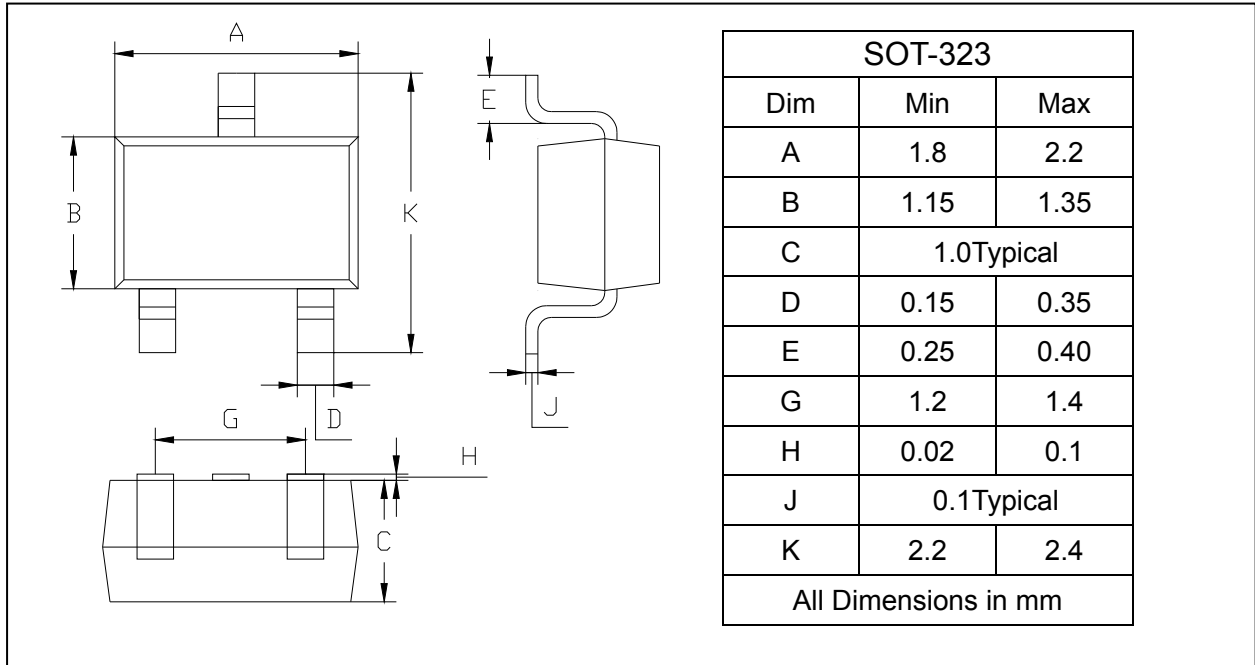
**Surface Mount Schottky Barrier Diode**

**BAS40W/-04/-05/-06**

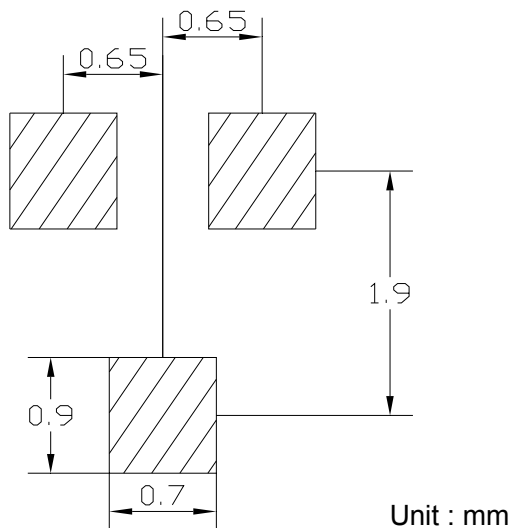
**PACKAGE OUTLINE**

Plastic surface mounted package

SOT-323



**SOLDERING FOOTPRINT**



**PACKAGE INFORMATION**

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