

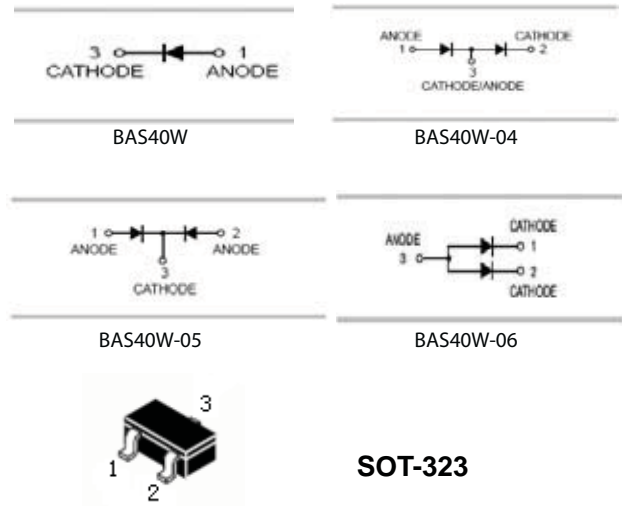
## Surface Mount Barrier Diodes: BAS40W/-04/-05/-06

### Features:

- Low turn-on voltage
- Fast switching
- Ultra-small surface mount package
- PN Junction guard ring for transient and ESD protection

### Applications:

- General purpose switching applications



### Maximum Rating @ Ta=25°C (unless otherwise specified):

Characteristic:	Symbol:	Limits:	Unit:
Peak repetitive 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

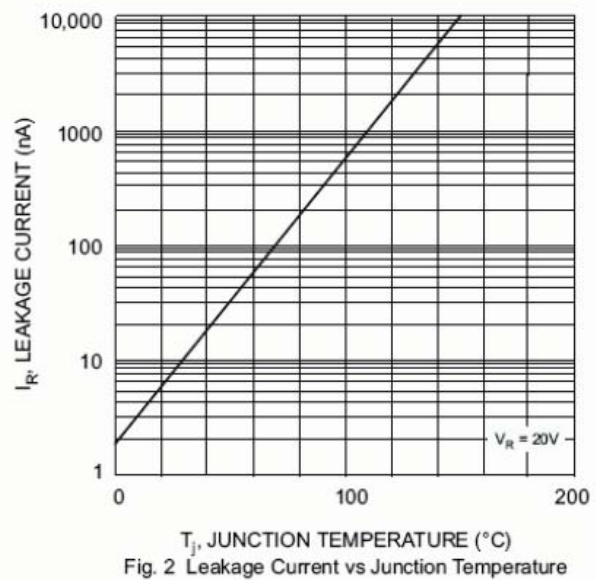
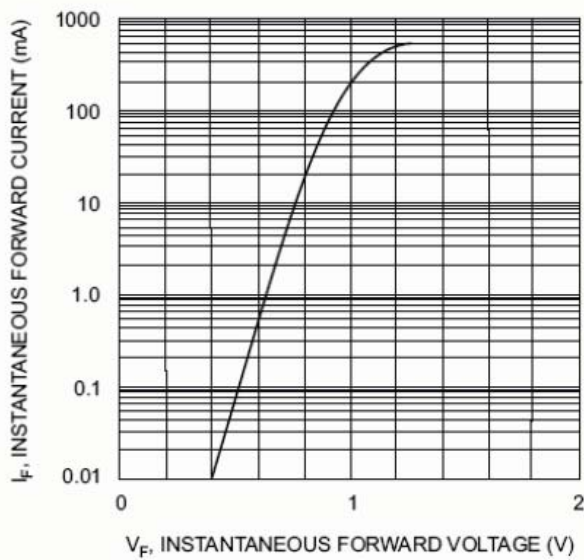
### Electrical Characteristics @ Ta=25°C (unless otherwise specified):

Characteristic:	Symbol:	Min	Max	Unit:	Test Condition:
Reverse Breakdown Voltage	$V_{(BR)R}$	40	-	V	$I_R = 10 \text{ A}$
Forward voltage	$V_F$	-	380 1000	mV	$I_F = 1.0 \text{ mA}$ , $t_p < 300 \mu\text{s}$ $I_F = 40 \text{ mA}$ , $t_p < 300 \mu\text{s}$
Reverse leakage current	$I_R$	-	200	nA	$t_p < 300 \mu\text{s}$ , $V_R = 30 \text{ V}$
Diode capacitance	$C_D$	-	5	pF	$V_R = 0 \text{ V}$ , $f = 1.0 \text{ MHz}$
Reverse recovery time	$t_{rr}$	-	5	ns	$I_F = I_R = 10 \text{ mA}$ $R_L = 100 \text{ Ohms}$

## Surface Mount Barrier Diodes: BAS40W/-04/-05/-06

Ordering Information	Marking:	Package Code:
BAS40W	43	SOT-323
BAS40W-04	44	SOT-323
BAS40W-05	45	SOT-323
BAS40W-06	46	SOT-323

**Typical Characteristics @ Ta=25°C** (unless otherwise specified):

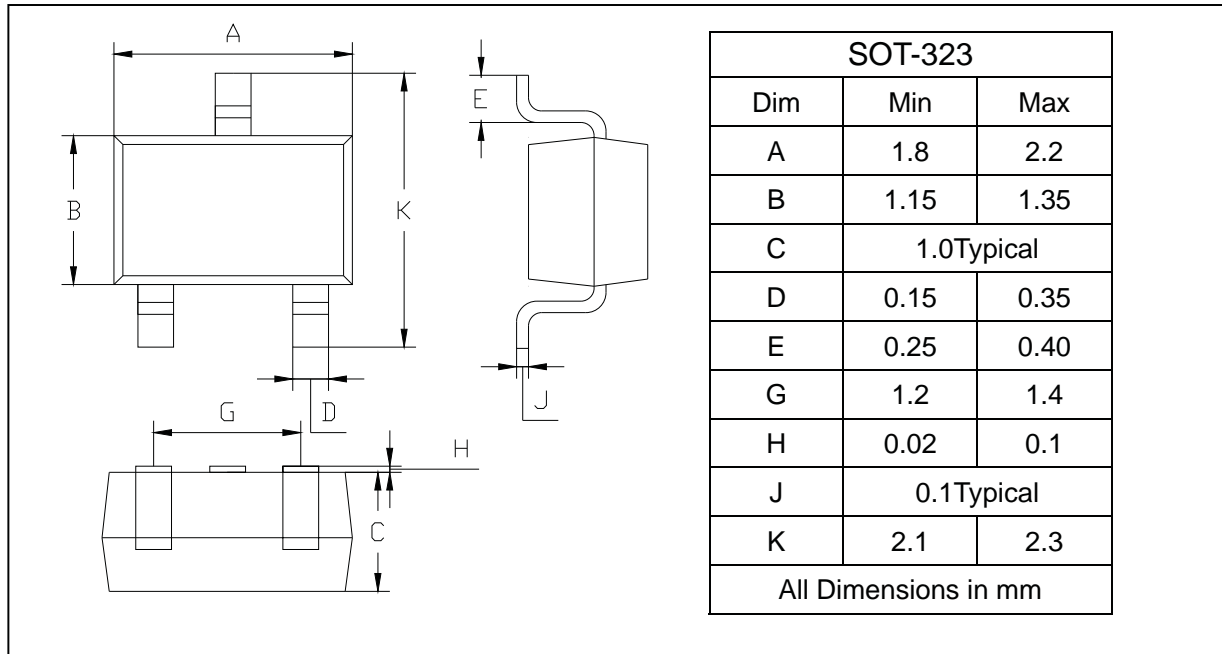


# Surface Mount Barrier Diodes: BAS40W/-04/-05/-06

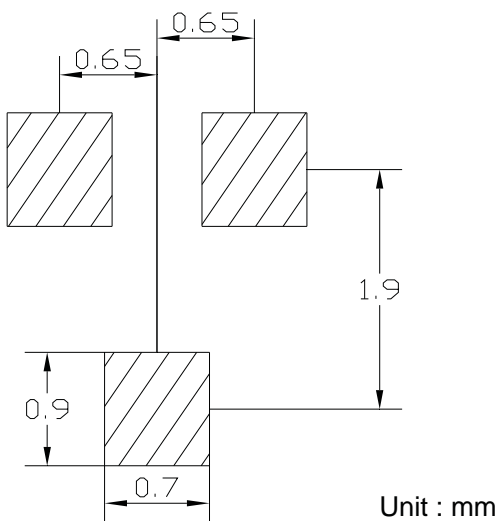
## PACKAGE OUTLINE

Plastic surface mounted package

S OT-323



## SOLDERING FOOTPRINT



## PACKAGE INFORMATION

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