



## Applications

General purpose switching applications

## Features

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

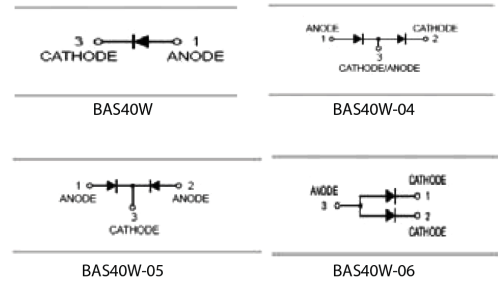
## Maximum Rating @ TA=25°C

Characteristic	Symbol	Limits	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage Diode Reverse Voltage	V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	40	V
Forward Continuous Current	I <sub>F</sub>	200	mA
Non-Repetitive Peak Forward Surge Current @ T=1Ms	I <sub>FS</sub>	600	mA
Power Dissipation	P <sub>D</sub>	200	mW
Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature Range	T <sub>STG</sub>	-65 to +150	

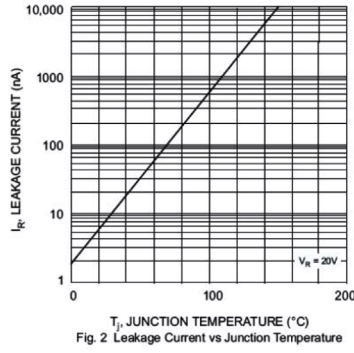
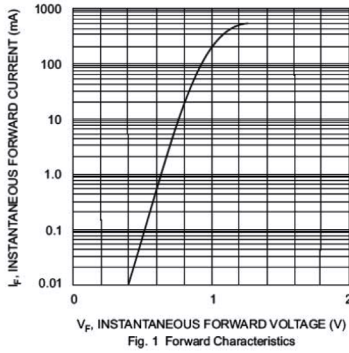
## Electrical Characteristics @ TA=25°C

Characteristic	Symbol	Min.	Max.	Unit	Test Condition
Reverse Breakdown Voltage	V <sub>(BR)R</sub>	40	-	V	I <sub>R</sub> = 10 A
Forward Voltage	V <sub>F</sub>	-	380 1000	mV	I <sub>F</sub> =1.0mA, t <sub>p</sub> <300μs I <sub>F</sub> =40mA, t <sub>p</sub> <300μs
Reverse Leakage Current	I <sub>R</sub>	-	200	nA	t <sub>p</sub> <300μs, V <sub>R</sub> =30V
Diode Capacitance	C <sub>D</sub>	-	5	pF	V <sub>R</sub> = 0V, f=1.0MHz
Reverse Recovery Time	t <sub>rr</sub>	-	5	ns	I <sub>F</sub> =I <sub>R</sub> =10mA R <sub>L</sub> =100Ω

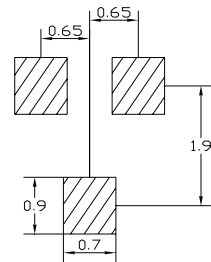
Ordering Information	Marking	Package Code
BAS40W	43	SOT-323
BAS40W-04	44	SOT-323
BAS40W-05	45	SOT-323
BAS40W-06	46	SOT-323



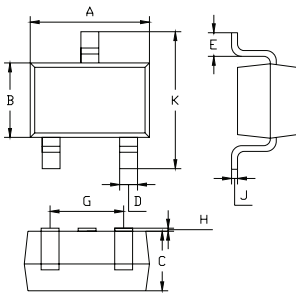
## Typical Characteristics @ TA=25°C



## Soldering Footprint



## Diagram



SOT-323		
Dim.	Min.	Max.
A	1.8	2.2
B	1.15	1.35
C	1 Typical	
D	0.15	0.35
E	0.25	0.4
G	1.2	1.4
H	0.02	0.1
J	0.1 Typical	
K	2.1	2.3

Dimensions : Millimetres

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