



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

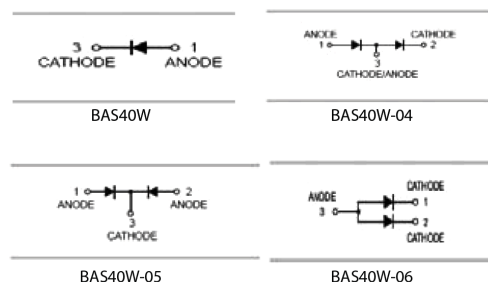
Maximum Rating @ TA=25°C

Characteristic	Symbol	Limits	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage Diode Reverse Voltage	V _{RRM} V _{VRM} V _R	40	V
Forward Continuous Current	I _F	200	mA
Non-Repetitive Peak Forward Surge Current @ T=1Ms	I _{FS}	600	mA
Power Dissipation	P _D	200	mW
Junction Temperature	T _J	150	°C
Storage Temperature Range	T _{STG}	-65 to +150	

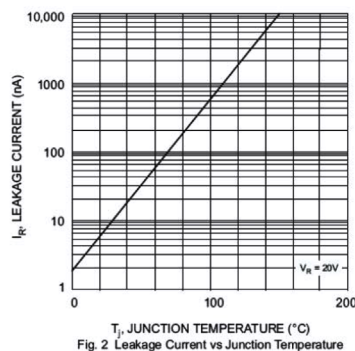
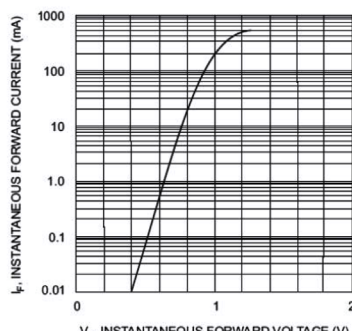
Electrical Characteristics @ TA=25°C

Characteristic	Symbol	Min.	Max.	Unit	Test Condition
Reverse Breakdown Voltage	V _{(BR)R}	40	-	V	I _R = 10 A
Forward Voltage	V _F	-	380 1000	mV	I _F =1.0mA, t _p <300μs I _F =40mA, t _p <300μs
Reverse Leakage Current	I _R	-	200	nA	t _p <300μs, V _R =30V
Diode Capacitance	C _d	-	5	pF	V _R =0V, f=1.0MHz
Reverse Recovery Time	t _{rr}	-	5	ns	I _F =I _R =10mA R _L =100Ω

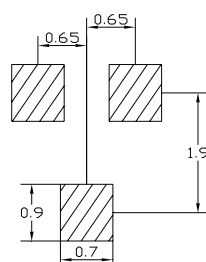
Ordering Information	Marking	Package Code
BAS40W	43	SOT-323
BAS40W-04	44	SOT-323
BAS40W-05	45	SOT-323
BAS40W-06	46	SOT-323



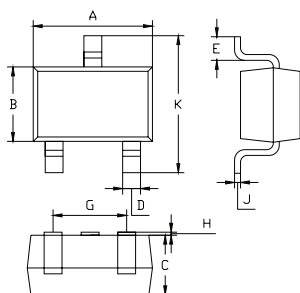
Typical Characteristics @ $T_A=25^\circ\text{C}$



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

Important Notice : This data sheet and its contents (the "Information") belong to the members of the AVNET group of companies (the "Group") or are licensed to it. No licence is granted for the use of it other than for information purposes in connection with the products to which it relates. No licence of any intellectual property rights is granted. The Information is subject to change without notice and replaces all data sheets previously supplied. The Information supplied is believed to be accurate but the Group assumes no responsibility for its accuracy or completeness, any error in or omission from it or for any use made of it. Users of this data sheet should check for themselves the Information and the suitability of the products for their purpose and not make any assumptions based on information included or omitted. Liability for loss or damage resulting from any reliance on the Information or use of it (including liability resulting from negligence or where the Group was aware of the possibility of such loss or damage arising) is excluded. This will not operate to limit or restrict the Group's liability for death or personal injury resulting from its negligence. Multicomp Pro is the registered trademark of Premier Farnell Limited 2019.