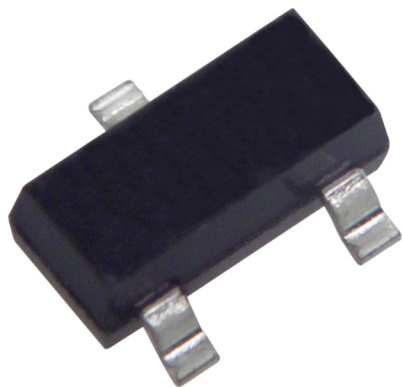


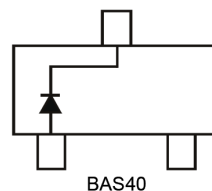


Features:

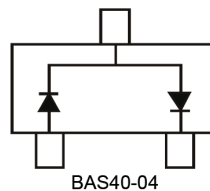
- Low turn-on voltage
- Fast switching
- PN Junction guard ring for transient and ESD protection

Applications:

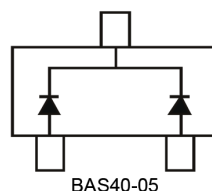
- High speed switching applications
- Circuit protecting
- Voltage clamping



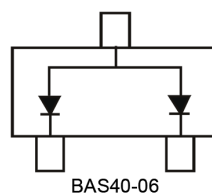
BAS40



BAS40-04



BAS40-05



BAS40-06

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

Characteristic	Symbol	Value	Unit
Peak repetitive reverse voltage Working peak reverse voltage DC reverse voltage	V_{RRM} V_{RWM} V_R	40	V
Forward continuous current	I_{FS}	200	mA
Power dissipation	P_D	350	mW
Forward surge	I_{FSM}	600	mA
Thermal resistance, junction to ambient air	R_{thJA}	357	°C/W
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.	Typ.	Max.	Unit	Test Condition
Reverse breakdown voltage	$V_{(BR)R}$	40	-	-	V	$I_{RS} = 10A$
Forward voltage	V_F	-	-	380 1,000	mV	$t_p < 300\mu s, I_F = 1mA$ $t_p < 300\mu s, I_F = 40mA$
Reverse leakage current	I_R	-	20	200	nA	$t_p < 300\mu s, V_R = 30V$
Junction capacitance	C_J	-	4	5	pF	$V_R = 0V, f = 1MHz$
Reverse recovery time	t_{rr}	-	-	5	ns	$I_F = I_R = 10mA$ to $I_R = 1mA, R_L = 100\Omega$

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

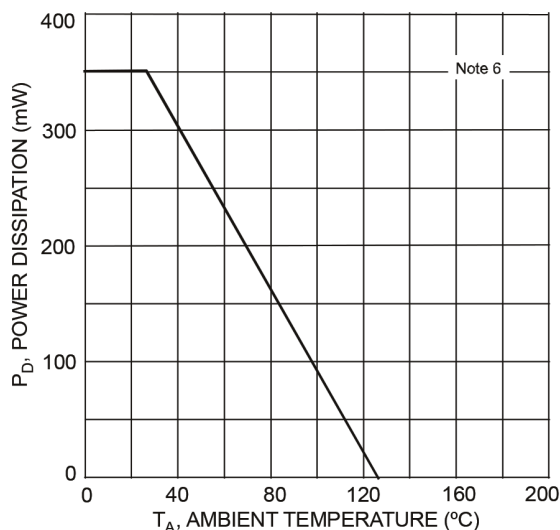


Figure 1 Power Derating Curve, Total Package

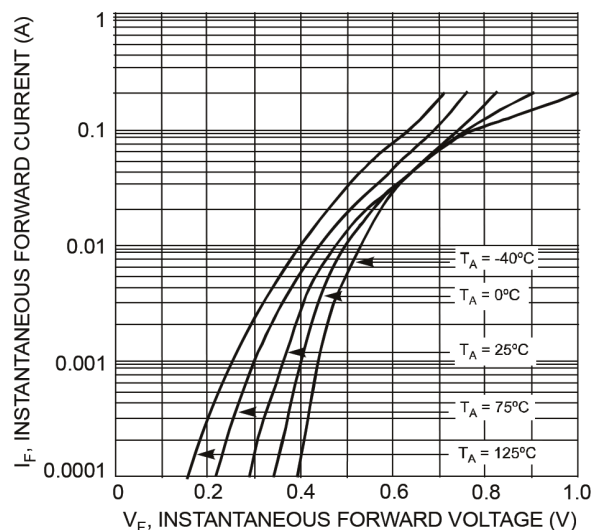


Figure 2 Typical Forward Characteristics

Typical Characteristics @ $T_A = 25^\circ\text{C}$ (unless otherwise specified):

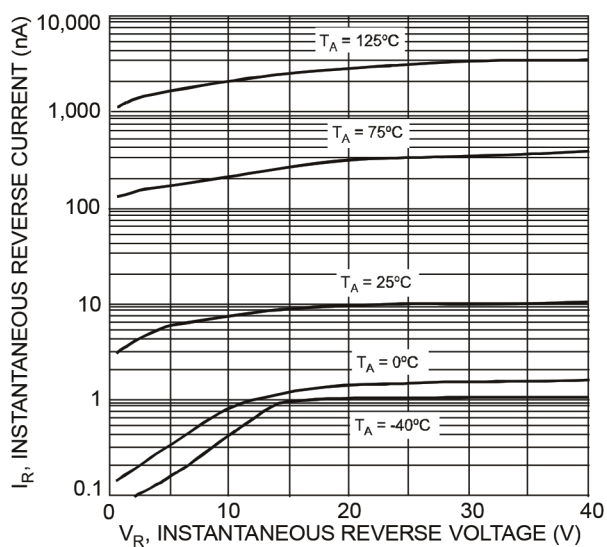


Figure 3 Typical Reverse Characteristics

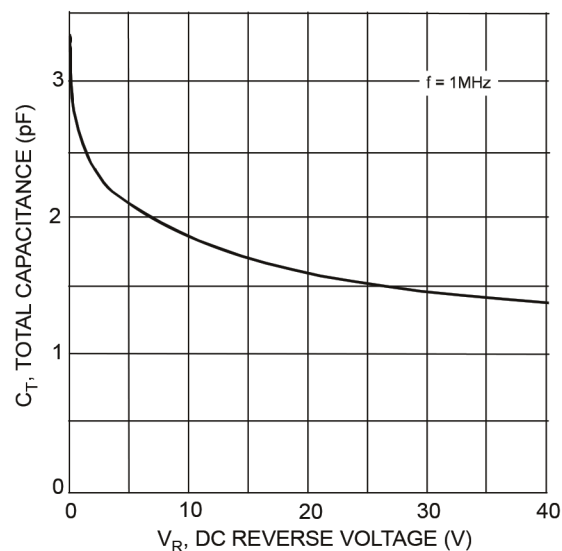
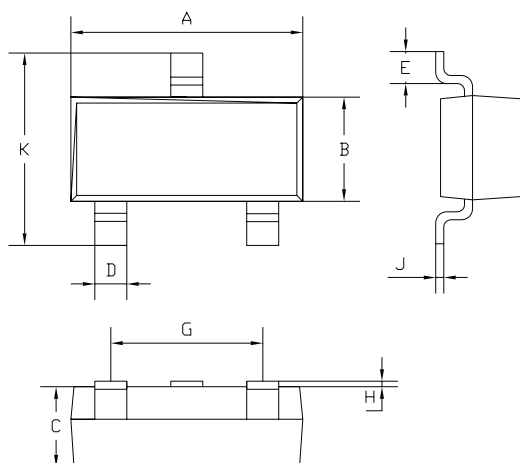


Figure 4 Total Capacitance vs. Reverse Voltage

Package Outline

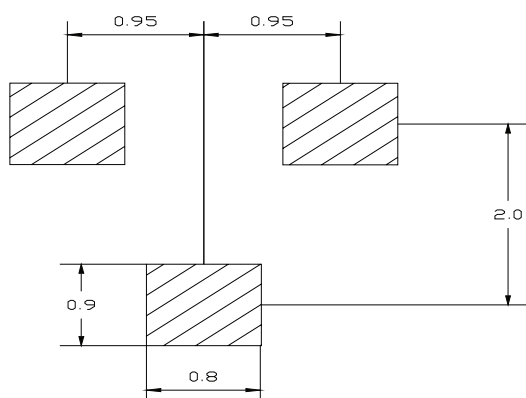
Plastic Surface Mounted Package



SOT-23		
Dim	Min	Max
A	2.85	2.95
B	1.25	1.35
C	1 Typical	
D	0.4 Typical	
E	0.35	0.48
G	1.85	1.95
H	0.02	0.1
J	0.1 Typical	
K	2.35	2.45

Dimensions : Millimetres

Soldering Footprint



Dimensions : Millimetres

Part Number Table

Description	Part Number
Diode, Schottky, 40V, SOT23	BAS40
Diode, Dual Schottky, 40V, SOT23	BAS40-04
	BAS40-05
	BAS40-06

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.