

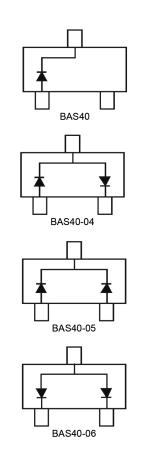


Features:

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

Applications:

- · High speed switching applications
- Circuit protecting
- Voltage clamping



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	$P_{_{\mathrm{D}}}$	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

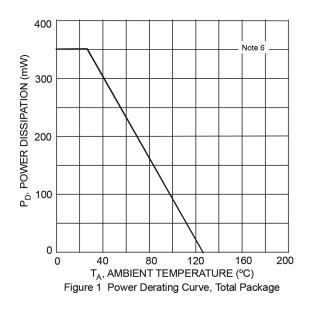


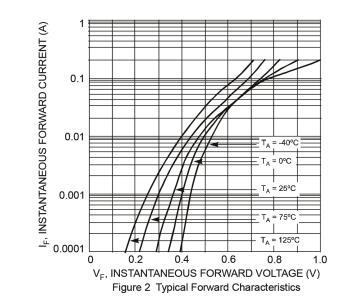


Electrical Characteristics @ Ta=25°C (unless otherwise specified):

Characteristic	Symbol	Min.	Тур.	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 <300µs, I_F =1mA t_p <300µs, I_F =40mA
Reverse leakage current	I _R	-	20	200	nA	t _P <300µs, V _R =30V
Junction capacitance	CJ	-	4	5	pF	V _R =0V, f=1MHz
Reverse recovery time	t _{rr}	-	-	5	ns	$I_F = I_R = 10 \text{mA to}$ $I_R = 1 \text{mA}, R_L = 100 \Omega$

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

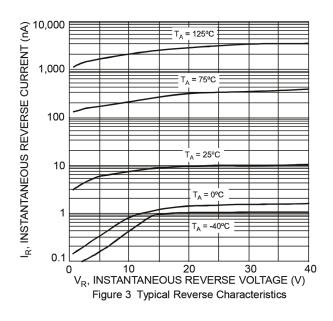


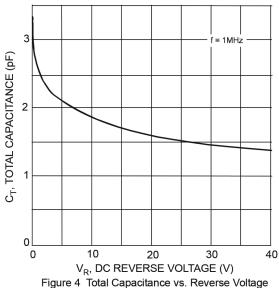






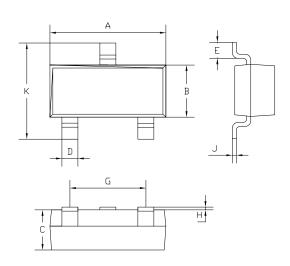
Typical Characteristics @ Ta=25°C (unless otherwise specified):





Package Outline

Plastic Surface Mounted Package



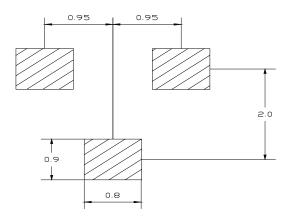
SOT-23				
Dim	Min	Max		
А	2.85	2.95		
В	1.25	1.35		
С	1 Typical			
D	0.4 Typical			
E	0.35	0.48		
G	1.85	1.95		
Н	0.02	0.1		
J	0.1 Typical			
K	2.35	2.45		

Dimensions: Millimetres





Soldering Footprint



Dimensions: Millimetres

Part Number Table

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

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