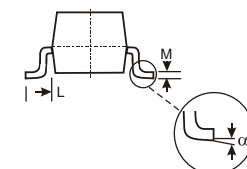
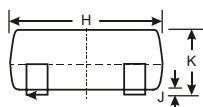
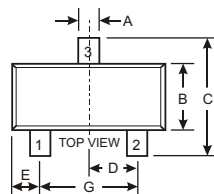


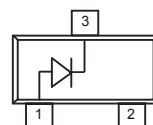
Features

- Low forward voltage
- Fast switching
- PN Junction Guard Ring for Transient and ESD Protection

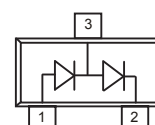
DEVICE	MARKING		TYPE
	1	2	
BAS40	43	K43	Single
BAS40-04	44	K44	Dual
BAS40-05	45	K45	Dual
BAS40-06	46	K46	Dual



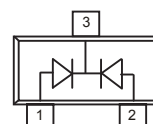
SOT-23		
Dim	Min	Max
A	0.37	0.51
B	1.20	1.40
C	2.30	2.50
D	0.89	1.03
E	0.45	0.60
G	1.78	2.05
H	2.80	3.00
J	0.013	0.10
K	0.903	1.10
L	0.45	0.61
M	0.085	0.180
α	0°	8°
All Dimensions in mm		



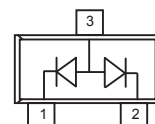
BAS40



BAS40-04



BAS40-05



BAS40-06

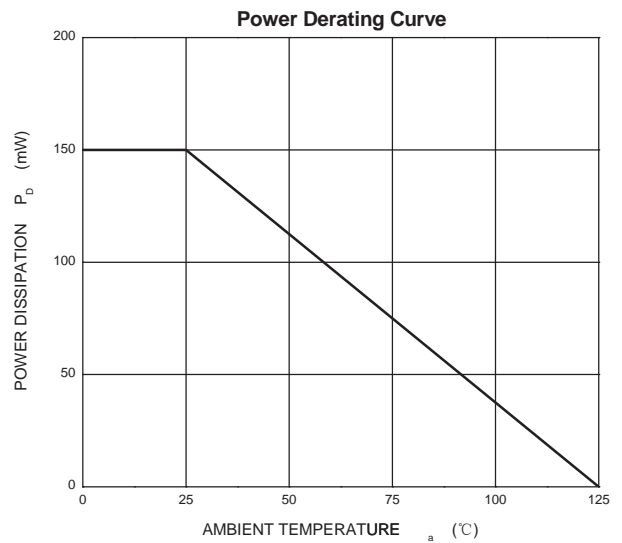
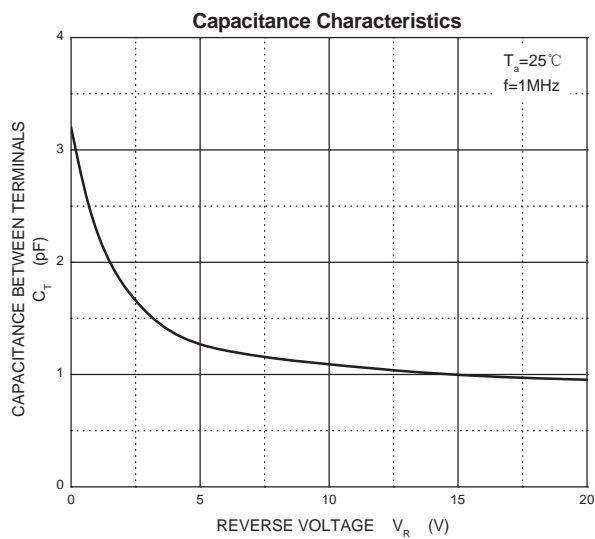
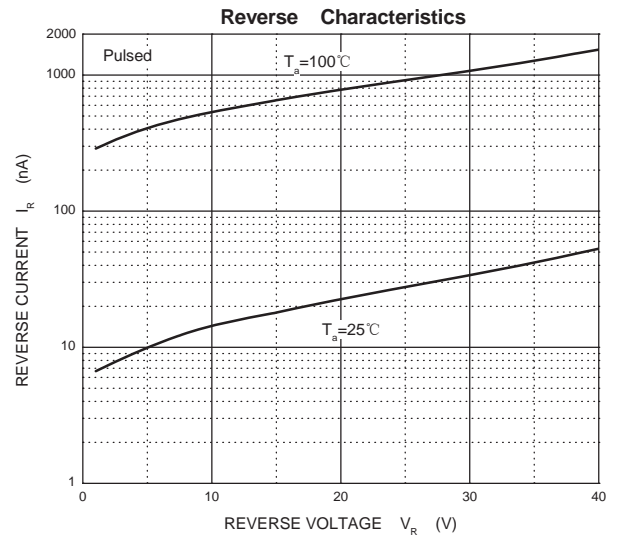
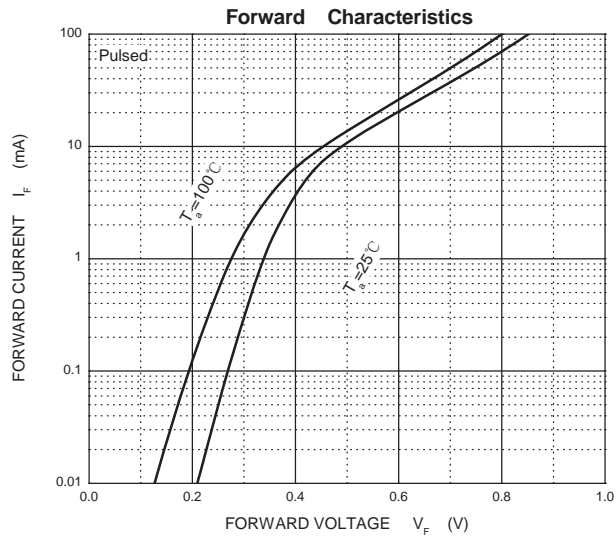
Maximum Ratings @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Parameter	Symbol	Limit	Unit
Repetitive peak reverse voltage	V_{RRM}	40	V
DC Blocking Voltage	V_R	40	V
Forward Continuous Current	I_F	200	mA
Repetitive peak forward surge current at Pulse width=1 second	I_{FSM}	600	mA
Junction temperature	T_J	150	$^\circ\text{C}$
Storage temperature range	T_{stg}	- 55 to + 150	$^\circ\text{C}$

Electrical Characteristics @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Parameter	Symbol	Min.	Max.	Unit
Forward Voltage at $I_F = 1\text{ mA}$ at $I_F = 40\text{ mA}$	V_F	-	380	mV
	V_F	-	1000	mV
Reverse Current at $V_R = 30\text{ V}$	I_R	-	200	nA
Reverse Breakdown Voltage at $I_R = 10\text{ }\mu\text{A}$	$V_{(BR)R}$	40	-	V
Reverse Recovery Time from $I_F = 10\text{ mA}$ through $I_R = 10\text{ mA}$ to $I_R = 1\text{ mA}$	t_{rr}	-	5	ns
Total Capacitance at $V_R = 0\text{ V}$, $f = 1\text{ MHz}$	C_T	-	5	pF

TYPICAL TRANSIENT CHARACTERISTICS



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