

»Features

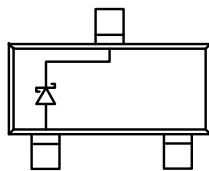
- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- Epitaxial construction



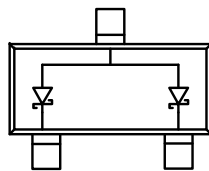
»General Description

- Case: molded plastic
- Polarity: Color band denotes cathode
- Package: SOT-23 Plastic Package

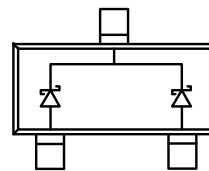
»Circuit and Marking



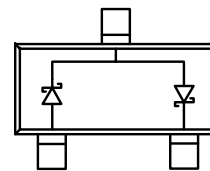
**BAS40: 43**



**BAS40-06:46**



**BAS40-05: 45**



**BAS40-04:44**

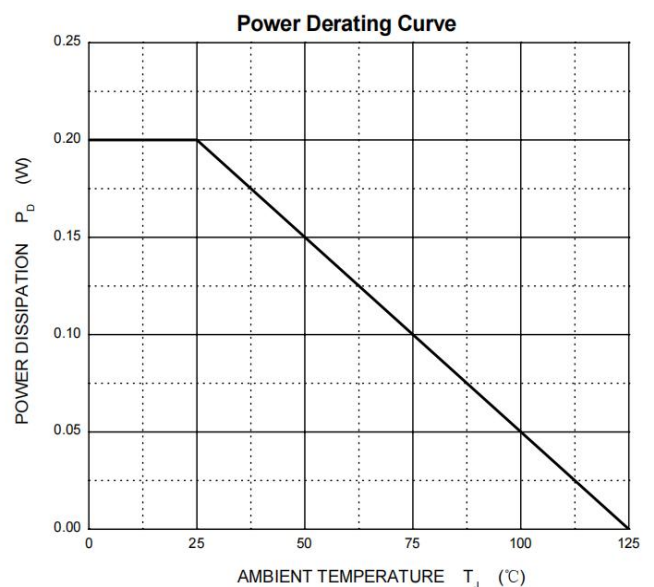
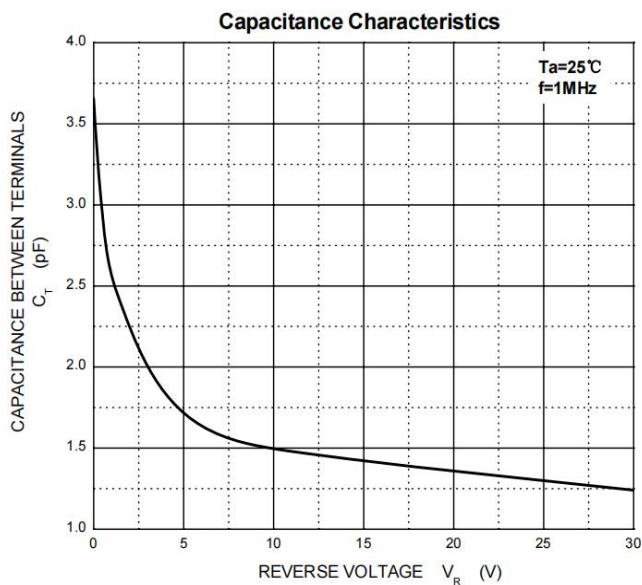
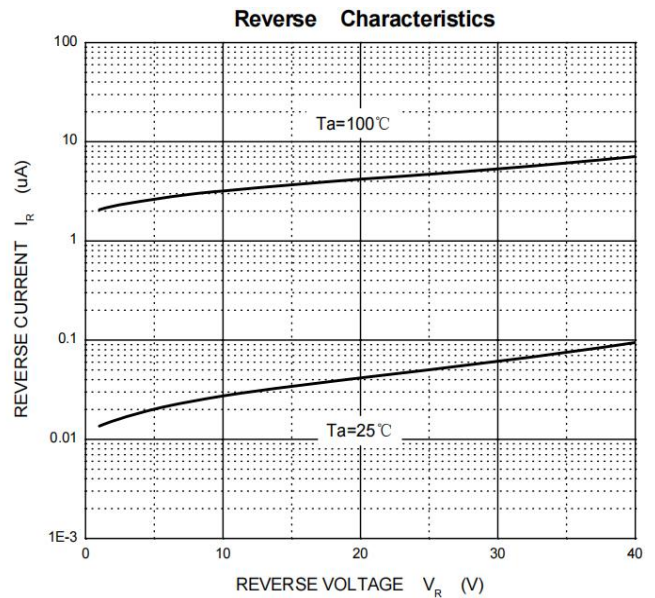
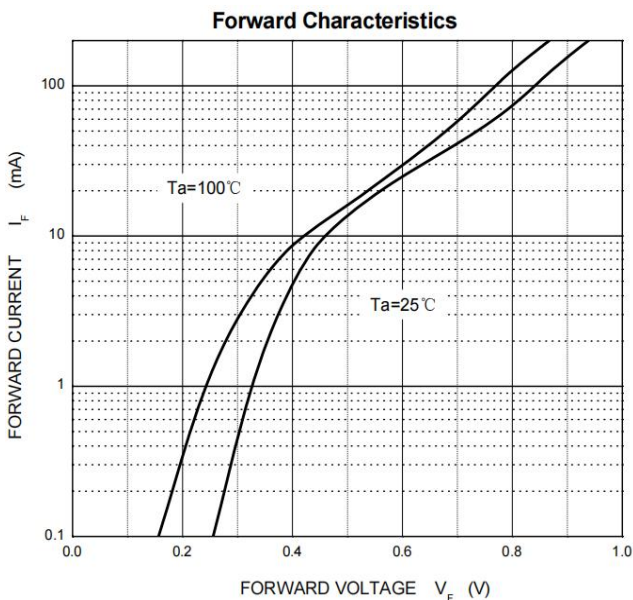
» Maximum Ratings @ $T_A=25^{\circ}\text{C}$  unless otherwise noted

Symbol	Parameter	Value	Unit
VRRM VRWM VR	Peak Repetitive Peak Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	40	V
IFM	Forward Continuous Current	200	mA
IO	Average Rectified Output Current	200	mA
IFSM	Non-repetitive Peak Forward Surge Current@8.3mS	0.6	A
Pd	Power Dissipation	200	mW
RθJA	Thermal Resistance From Junction To Ambient	450	°C/W
TJ	Operation Junction Temperature Range	-40~+125	°C
TSTG	Storage Temperature Range	-55~+150	°C

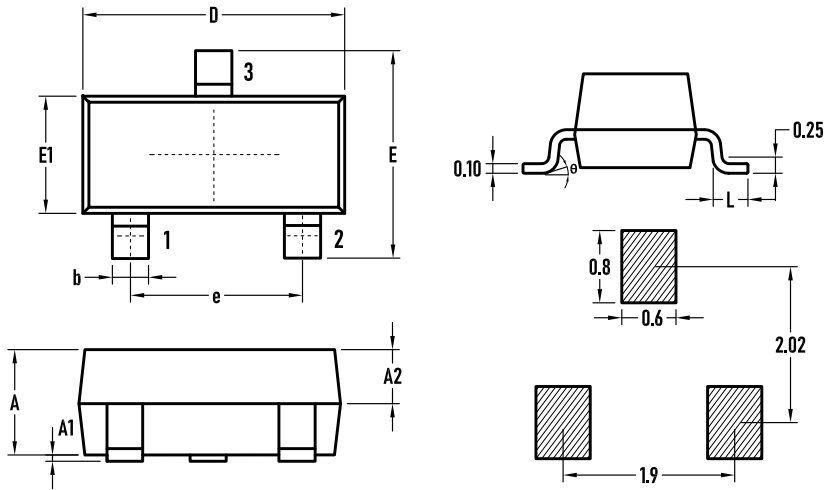
» **Electrical Characteristics** @ $T_A=25^\circ\text{C}$  unless otherwise noted

Symbol	Parameter	Test conditions	Min	Max	Unit
V(BR)	Reverse breakdown voltage	$I_R=10\mu\text{A}$	40		V
$I_R$	Reverse current	$V_R=30\text{V}$		200	nA
VF	Forward voltage	$I_F=1\text{mA}$		380	mV
		$I_F=40\text{mA}$		1000	mV
CD	Diode capacitance	$V_R=0\text{V}, f=1\text{MHz}$		5	pF
$t_{rr}$	Reverse recovery time	$I_F=I_R=10\text{mA}, I_{rr}=1\text{mA}, R_L=100\Omega$		5	nS

» **Typical Performance Characteristics** ( $T_J = 25^\circ\text{C}$ , unless otherwise noted)



»Package Information SOT-23



SYMBOL	MILLIMETER		
	MIN.	Typ	MAX
A	0.90	1.00	1.10
A1	0.02	0.06	0.10
A2	–	0.60	–
D	2.85	2.90	2.95
b	0.37	0.40	0.43
E	2.35	2.40	2.45
E1	1.25	1.30	1.35
e	1.85	1.90	1.95
L	0.35	0.40	0.48
θ	0	–	6°

»Ordering information

Order code	Package	Base qty	Delivery mode
BAS40/-04/-05/-06	SOT-23	3K	Tape and reel