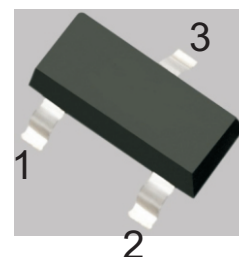




SOT-23

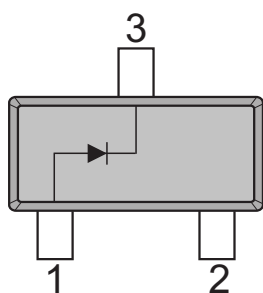


BAS40/-04/-05/-06

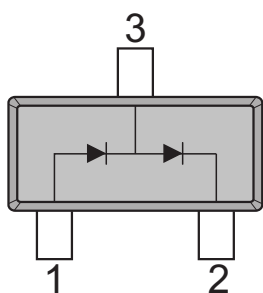
SCHOTTKY BARRIER DIODE

FEATURES

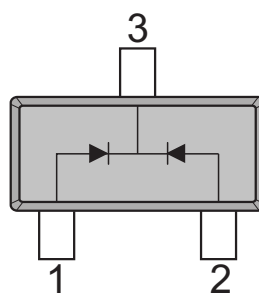
- Low Forward Voltage
- Fast Switching



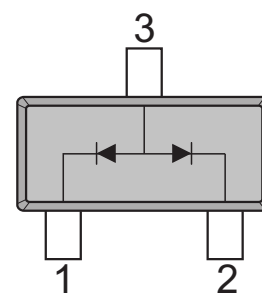
BAS40



BAS40-04



BAS40-05



BAS40-06

MAXIMUM RATINGS ( Ta=25°C unless otherwise noted )

Parameter	Symbol	Value	Unit
DC Blocking Voltage	$V_R$		
Working Peak Reverse Voltage	$V_{RWM}$	40	V
Peak Repetitive Peak Reverse Voltage	$V_{RRM}$		
Forward continuous current	$I_{FM}$	200	mA
Non-Repetitive Peak Forward Surge Current @t=8.3ms	$I_{FSM}$	600	mA
Power Dissipation	$P_D$	200	mW
Thermal Resistance From Junction To Ambient	$R_{thJA}$	500	°C/W
Junction Temperature	$T_j$	125	°C
Storage Temperature Range	$T_{stg}$	-55 ~ +150	°C

ELECTRICAL CHARACTERISTICS(Ta=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Max	Unit
Reverse breakdown voltage	$V_{BR}$	$I_R=10\mu A$	40		V
Reverse voltage leakage current	$I_R$	$V_R=30V$		0.2	$\mu A$
Forward voltage	$V_F$	$I_F=1mA$ $I_F=40mA$		0.38 1.0	V
Diode capacitance	$C_D$	$V_R=0, f=1MHz$		5	pF
Reverse recovery time	$t_{rr}$	$I_{rr}=1mA, I_F=I_R=10mA$ $R_L=100\Omega$		5	ns



Fig.1 Power Derating Curve

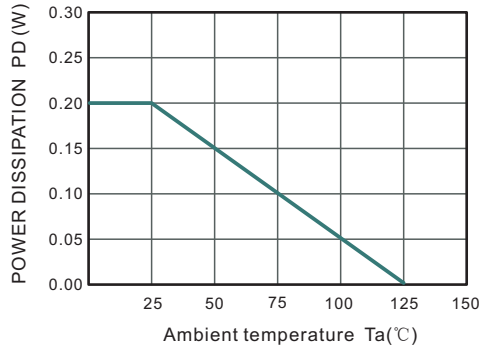


Fig.2 Typical Reverse Characteristics

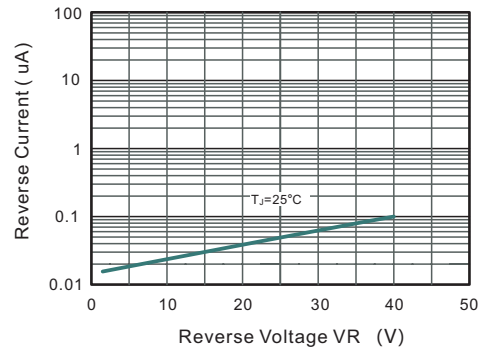


Fig.3 Forward Characteristics

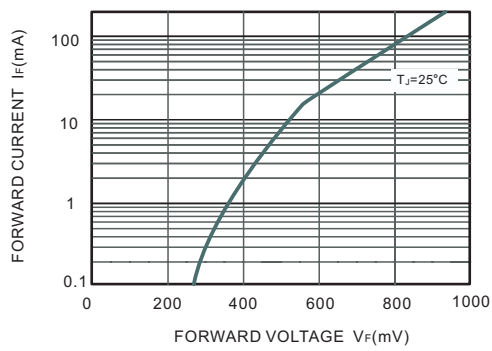
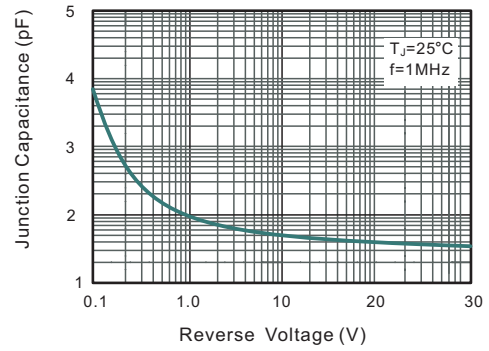
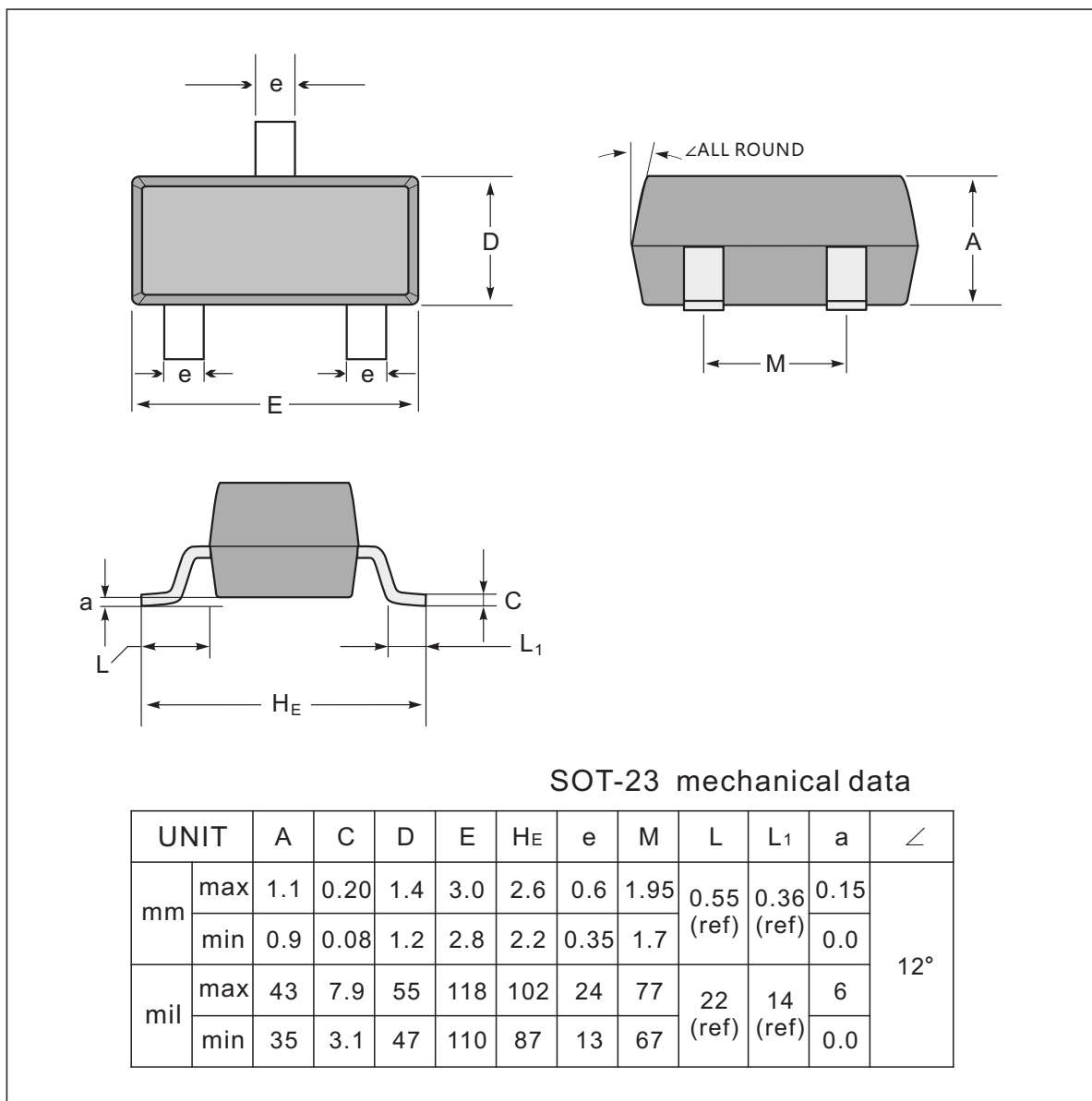


Fig.4 Typical Junction Capacitance

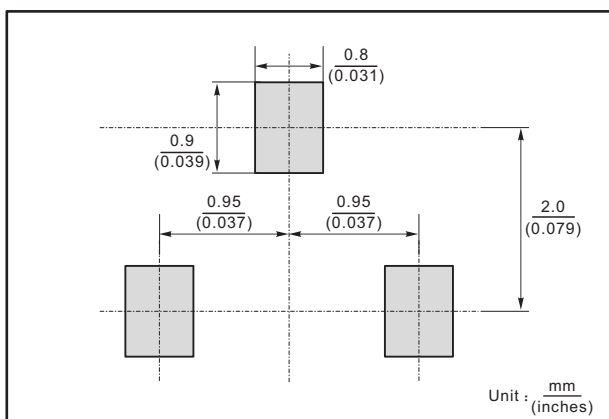




### SOT-23 Package Outline Dimensions



#### The recommended mounting pad size



#### Marking

Type number	Marking code
BAS40	43
BAS40-04	44
BAS40-05	45
BAS40-06	46