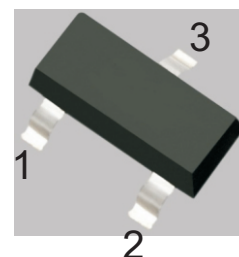




SOT-23

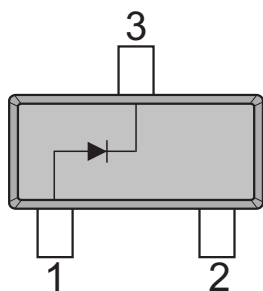


BAS40/-04/-05/-06

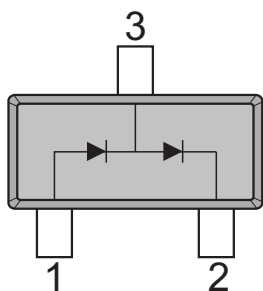
SCHOTTKY BARRIER DIODE

FEATURES

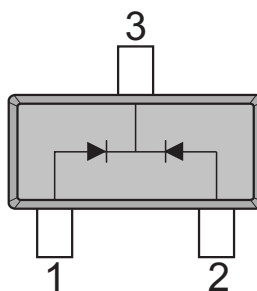
- Low Forward Voltage
- Fast Switching



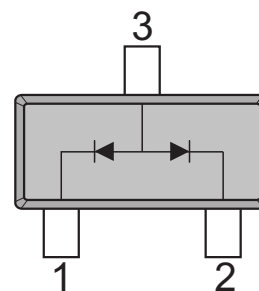
BAS40



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	μA
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

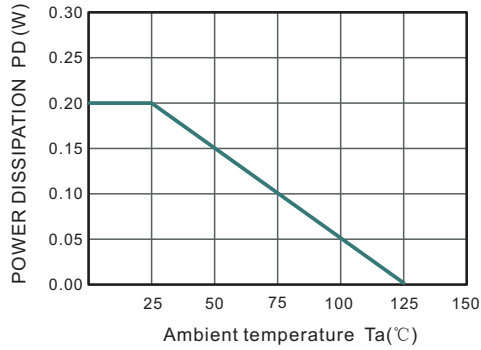


Fig.2 Typical Reverse Characteristics

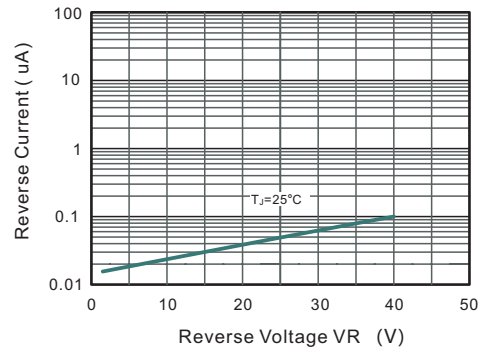


Fig.3 Forward Characteristics

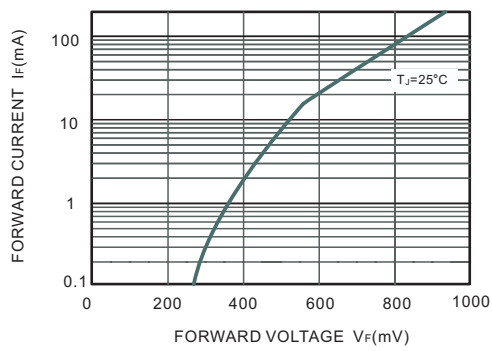
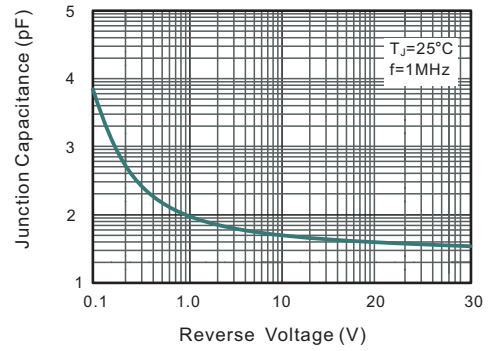
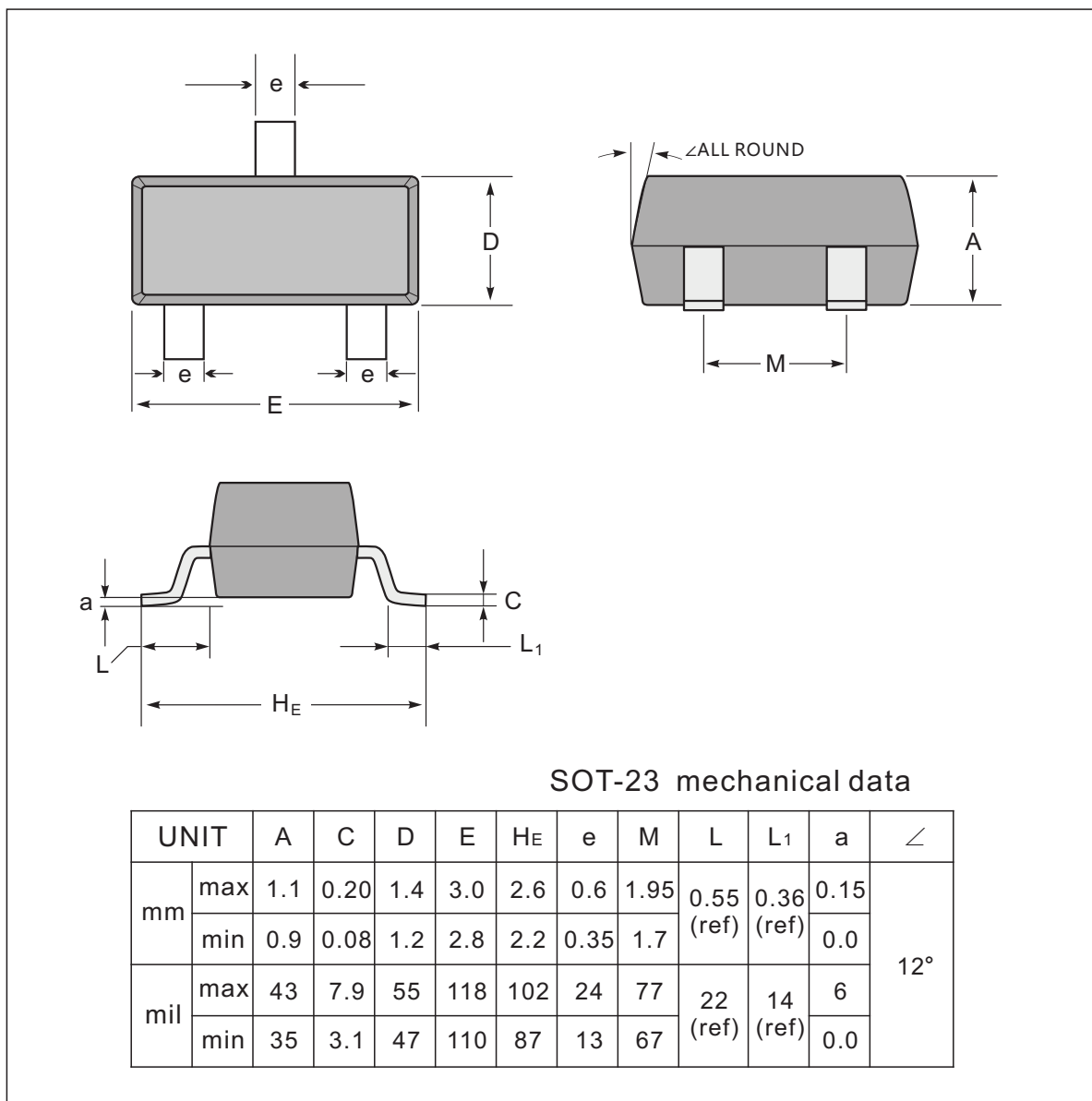


Fig.4 Typical Junction Capacitance

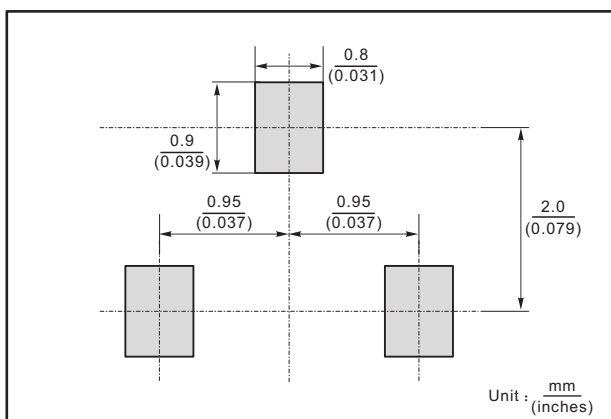




SOT-23 Package Outline Dimensions



The recommended mounting pad size



Marking

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