

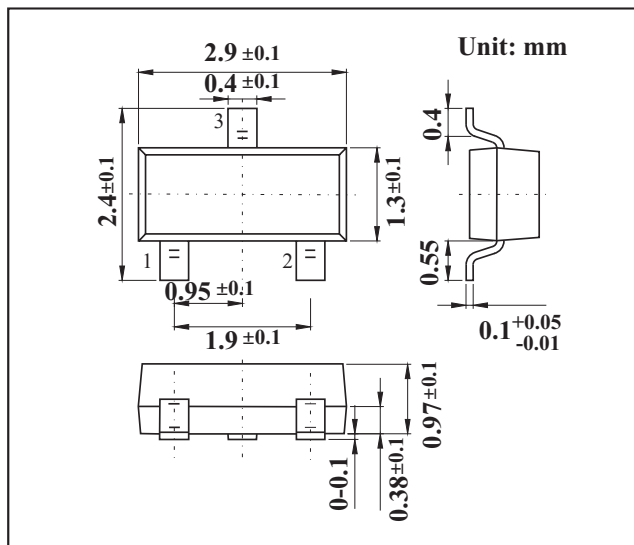
SOT-23 Small Signal Switching Diodes

FEATURES

- The plastic package carries Underwrites Laboratory Flammability Classification 94V-0
- Construction utilizes void-free molded plastic technique
- High reliability
- High temperature soldering guaranteed:260 °C/10 seconds at terminals
- Component in accordance to RoHs 2015/863 and WEEE 2012/19/EU

MECHANICAL DATA

- Case style: SOT-23 molded plastic
- Mounting position: Any



MAXIMUM RATINGS AND CHARACTERISTICS

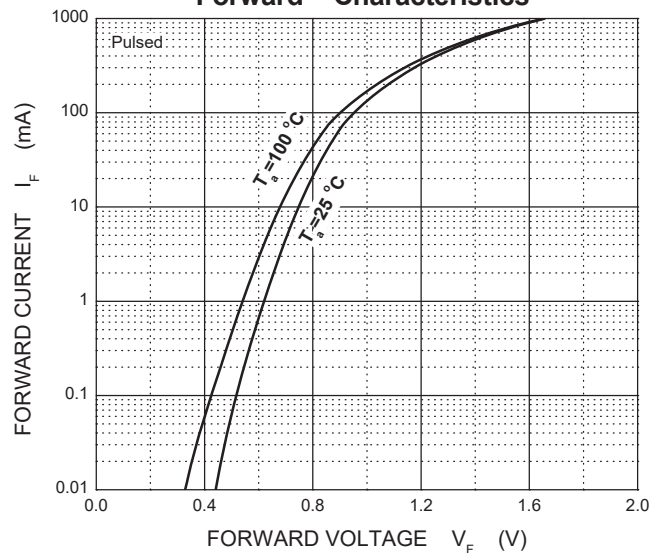
@ 25°C Ambient Temperature (unless otherwise noted)

Symbol	Parameter	BAS19	BAS20	Un
V_{RRM}	Repetitive Peak Reverse Voltage	120	200	V
V_{RWM}	Working Peak Reverse Voltage	100	150	V
I_o	Average Rectified Output Current	200		mA
I_{FSM}	Non-Repetitive Peak Forward Surge Current @t=8.3ms	2.5		A
P_d	Power Dissipation	250		mW
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	5		°C/W
T_J	Junction temperature	150		°C
T_{stg}	Storage Temperature	-55 ~ +150		°C

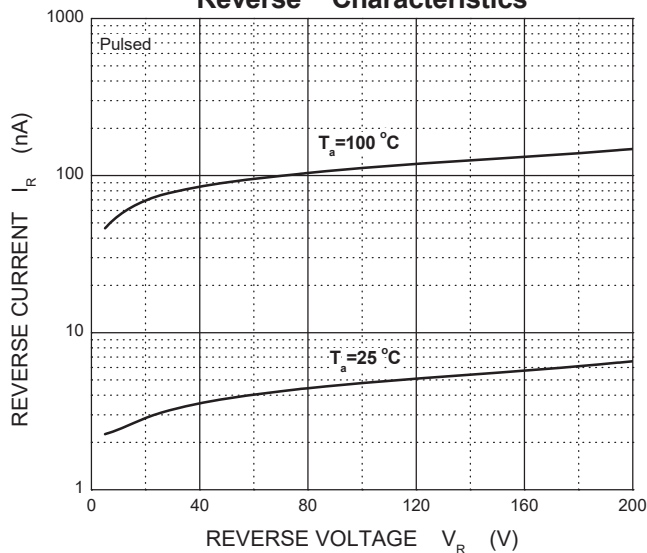
Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	$I_R=100\mu A$	120			V
			200			
Reverse current	I_R	$V_R=100V$			0.1	μA
		$V_R=150V$				
Forward voltage	V_F	$I_F=100mA$			1	V
		$I_F=200mA$			1.25	
Diodes capacitance	C_D	$V_R=0V, f=1MHz$			5	pF
Reveres recovery time	t_{rr}	$I_F=I_R=30mA, I_{rr}=0.1 \cdot I_R$			50	ns

RATINGS AND CHARACTERISTIC CURVES

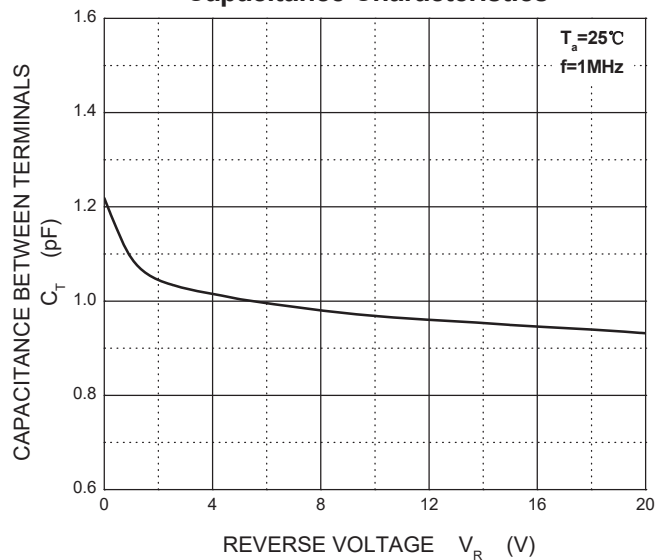
Forward Characteristics



Reverse Characteristics



Capacitance Characteristics



Power Derating Curve

