

December 2004

# BAW62 Small Signal Diode



DO-35 Color Band Denotes Cathode

## Absolute Maximum Ratings \* T<sub>a</sub> = 25°C unless otherwise noted

Symbol	Parameter	Value	Unit
V <sub>RRM</sub>	Maximum Repetitive Reverse Voltage	75	V
I <sub>F(AV)</sub>	Average Rectified Forward Current	300	mA
I <sub>FSM</sub>	Non-repetitive Peak Forward Surge Current Pulse Width = 1.0 second Pulse Width = 1.0 microsecond	1.0 4.0	A A
T <sub>STG</sub>	Storage Temperature Range	-65 to +200	°C
TJ	Operating Junction Temperature	175	°C

\* These ratings are limiting values above which the serviceability of the diode may be impaired.

NOTES:

1) These ratings are based on a maximum junction temperature of 200 degrees C.

2) These are steady limits. The factory should be consulted on applications involving pulsed or low duty cycle operations.

### **Thermal Characteristics**

Symbol	Parameter	Value	Unit
PD	Power Dissipation	500	mW
$R_{\thetaJA}$	Thermal Resistance, Junction to Ambient	300	°C/W

Electrical Characteristics T<sub>c</sub> = 25°C unless otherwise noted

Symbol	Parameter	Conditions	Min.	Max	Units
V <sub>R</sub>	Breakdown Voltage	I <sub>R</sub> = 5μA	75		V
V <sub>F</sub>	Forward Voltage	I <sub>F</sub> = 5mA I <sub>F</sub> = 100mA I <sub>F</sub> = 100mA, T = 100°C	0.62	0.75 1.0 0.93	V V V
I <sub>R</sub>	Reverse Leakage	$V_{R} = 20V V_{R} = 20V, T_{A} = 150^{\circ}C V_{R} = 50V V_{R} = 75V V_{R} = 75V, T_{A} = 150^{\circ}C $		25 50 200 5 100	nA μA nA μA μA
CT	Total Capacitance	V <sub>R</sub> = 0, f = 1.0MHz		2	pF
t <sub>rr</sub>	Reverse Recovery Time	$I_{F} = I_{R} = 10 \text{mA}, I_{rr} = 1 \text{mA}, R_{L} = 100 \Omega,$		4	ns

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