

# **BAW76**

# **Small Signal Diode**



DO-35
Color Band Denotes Cathode

# Absolute Maximum Ratings \* $T_a = 25$ °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
T <sub>J</sub>	Operating Junction Temperature	175	°C

 $<sup>^{\</sup>star}$  These ratings are limiting values above which the serviceability of the diode may be impaired.

#### NOTES:

### **Thermal Characteristics**

Symbol	Parameter	Value	Unit
$P_{D}$	Power Dissipation	500	mW
$R_{\theta JA}$	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	$I_R = 5\mu A$	75		V
V <sub>F</sub>	Forward Voltage	I <sub>F</sub> = 100mA		1.0	V
I <sub>R</sub>	Reverse Leakage	V <sub>R</sub> = 50V V <sub>R</sub> = 50V, T <sub>A</sub> = 150°C		100 100	nA μA
C <sub>T</sub>	Total Capacitance	V <sub>R</sub> = 0, f = 1.0MHz		2	pF
t <sub>rr</sub>	Reverse Recovery Time	$I_F = 10 \text{mA}, V_R = 6.0 \text{V}$ $R_L = 100 \Omega, I_{rr} = 1 \text{mA}$		2	ns
		$I_F = I_R = 10 \text{mA}, I_{rr} = 1.0 \text{mA},$ $R_L = 100 \Omega$		4	ns

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

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

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