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BAY73

Small Signal Diode



DO-35
Color Band Denotes Cathode

Absolute Maximum Ratings * $T_a = 25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Value	Unit
V_{RRM}	Maximum Repetitive Reverse Voltage	125	V
$I_{F(AV)}$	Average Rectified Forward Current	500	mA
I_{FSM}	Non-repetitive Peak Forward Surge Current Pulse Width = 1.0 second Pulse Width = 1.0 microsecond	1.0 4.0	A A
T_{STG}	Storage Temperature Range	-65 to +200	$^\circ\text{C}$
T_J	Operating Junction Temperature	175	$^\circ\text{C}$

* 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
P_D	Power Dissipation	500	mW
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	300	$^\circ\text{C/W}$

Electrical Characteristics $T_C = 25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Conditions	Min.	Max	Units
V_R	Breakdown Voltage	$I_R = 100\mu\text{A}$	125		V
V_F	Forward Voltage	$I_F = 1\text{mA}$ $I_F = 5\text{mA}$ $I_F = 10\text{mA}$ $I_F = 50\text{mA}$ $I_F = 100\text{mA}$ $I_F = 200\text{mA}$	0.60 0.67 0.69 0.78 0.81 0.85	0.68 0.75 0.80 0.88 0.94 1.0	V V V V V V
I_R	Reverse Leakage	$V_R = 100\text{V}$ $V_R = 100\text{V}, T_A = 125^\circ\text{C}$ $V_R = 20\text{V}, T_A = 125^\circ\text{C}$		5 1 500	nA μA nA
C_T	Total Capacitance	$V_R = 0, f = 1.0\text{MHz}$		8	pF
t_{rr}	Reverse Recovery Time	$I_F = I_R = 30\text{mA}, I_{rr} = 3\text{mA}, R_L = 100\Omega$		1.0	μs

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