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## ON Semiconductor®

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### 1N458A



DO-35 COLOR BAND DENOTES CATHODE

### **Small Signal Diode**

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

Symbol	Parameter	Value	Units
$V_{RRM}$	Maximum Repetitive Reverse Voltage	150	V
I <sub>F(AV)</sub>	Average Rectified Forward Current	500	mA
I <sub>FSM</sub>	Non-repetitive Peak Forward Surge Current		
	Pulse Width = 1.0 second	1.0	Α
	Pulse Width = 1.0 microsecond	4.0	Α
T <sub>STG</sub>	Storage Temperature Range	-65 to +200	°C
 Г <sub>Ј</sub>	Operating Junction Temperature	175	°C

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

#### **Thermal Characteristics**

Symbol	Parameter	Value	Units
P <sub>D</sub>	Power Dissipation	500	mW
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	300	°C/W

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

Symbol	Parameter	Test Conditions	Min.	Max.	Units
$V_R$	Breakdown Voltage	I <sub>R</sub> = 100μA	150		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> = 125V		25	nA
		$V_R = 125V, T_A = 150^{\circ}C$		5	μΑ

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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.

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1N458A 1N458A\_S00Z 1N458ATR 1N458A\_T50R 1N458A\_Q



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