To loarn more about ON Semiconductor, please visit our website at
To learn more about ON Semiconductor, please visit our website at <a href="https://www.onsemi.com">www.onsemi.com</a>
Please note: As part of the Fairchild Semiconductor integration, some of the Fairchild orderable part numbers will need to change in order to meet ON Semiconductor's system requirements. Since the ON Semiconductor product management systems do not have the ability to manage part nomenclature that utilizes an underscore (_), the underscore (_) in the Fairchild part numbers will be changed to a dash (-). This document may contain device numbers with an underscore (_). Please check the ON Semiconductor website to verify the updated device numbers. The most current and up-to-date ordering information can be found at <a href="www.onsemi.com">www.onsemi.com</a> . Please email any questions regarding the system integration to <a href="mailto:Fairchild questions@onsemi.com">Fairchild questions@onsemi.com</a> .

Absolute Maximum Ratings \*

## SEMICONDUCT R

## 1N3070



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

•			
STG	Storage Temperature Range	-65 to +200	°C
TJ	Operating Junction Temperature	175	°C

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

Thermal Resistance, Junction to Ambient

 $\mathsf{P}_\mathsf{D}$ 

 $R_{\theta JA}$ 

Т

Power Dissipation

Symbol		Parameter		Value
r disc Width = 1	o moroscoona	4.0	^	
Pulse Width = 1.0 microsecond		4.0	Α	
Pulse Width = 1	0 second	1.0	Α	
<ol><li>TNon-repetitive P</li></ol>	eak Forward Surge Current			
	based on a maximum junction temp	erature of 200 degrees C.		
NOTES:				

Symbol	Parameter	Test Conditions	Min.	Max.	Units
V <sub>R</sub>	Breakdown Voltage	I <sub>R</sub> = 100μA	200		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> = 175V		100	nA
• •		$V_{\rm D} = 175 \text{V}$ . $T_{\rm A} = 150 ^{\circ} \text{C}$		100	пΑ

$V_R$	Breakdown Voltage	$I_R = 100\mu A$	200		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> = 175V		100	nA
		$V_R = 175V, T_A = 150^{\circ}C$		100	μΑ
$C_{T}$	Total Capacitance	$V_R = 0V$ , $f = 1.0MHz$		5	pF
t <sub>rr</sub>	Reverse Recovery Time	$I_F = I_R = 30$ mA, $RL = 100$ $\Omega$		50	ns

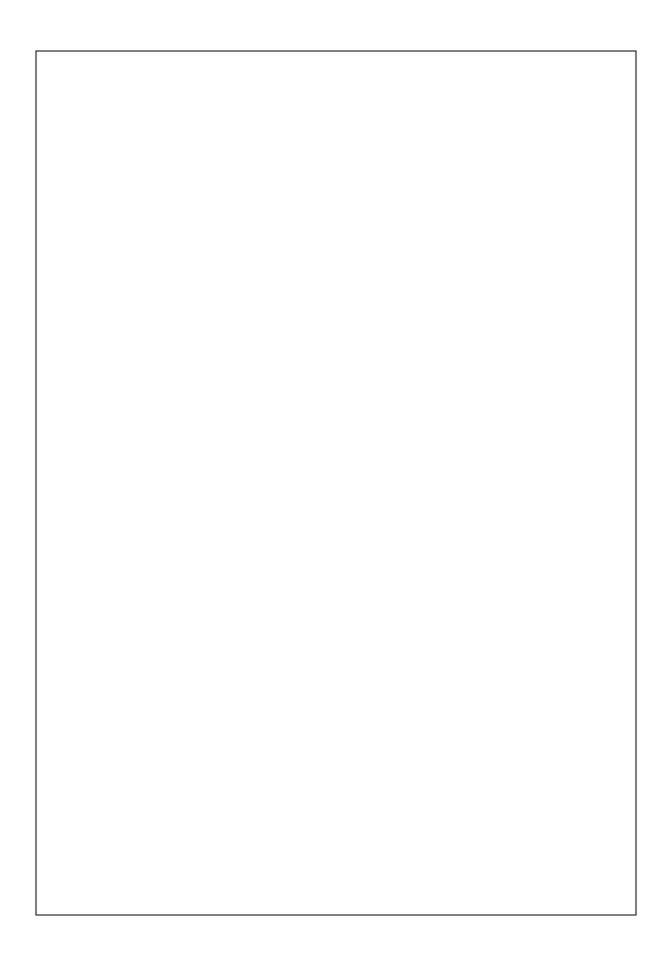
Units

 $\, mW \,$ 

°С

500

300



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