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**2N656
 2N657**

NPN SILICON TRANSISTOR

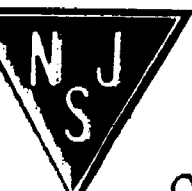
JEDEC TO-39 CASE

MAXIMUM RATINGS ($T_A = 25^\circ\text{C}$)

	<u>SYMBOL</u>	<u>2N656</u>	<u>2N657</u>	<u>UNITS</u>
Collector-Base Voltage	V_{CB0}	60	100	V
Collector-Emitter Voltage	V_{CEO}	60	100	V
Emitter-Base Voltage	V_{EBO}	8.0	8.0	V
Collector Current	I_C	1.0	0.5	A
Power Dissipation	P_D		1.0	W
Power Dissipation ($T_C = 25^\circ\text{C}$)	P_D		4.0	W
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 to +200		$^\circ\text{C}$
Thermal Resistance	θ_{JA}	175		$^\circ\text{C/W}$
Thermal Resistance	θ_{JC}	43.75		$^\circ\text{C/W}$

ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ unless otherwise noted)

<u>SYMBOL</u>	<u>TEST CONDITIONS</u>	<u>2N656</u>		<u>2N657</u>		<u>UNITS</u>
		<u>MIN</u>	<u>MAX</u>	<u>MIN</u>	<u>MAX</u>	
I_{CBO}	$V_{CB} = 30V$		10		10	μA
BV_{CBO}	$I_C = 100\mu\text{A}$	60		100		V
BV_{CEO}	$I_C = 250\mu\text{A}$	60		100		V
BV_{EBO}	$I_E = 250\mu\text{A}$	8.0		8.0		V
$V_{CE(SAT)}$	$I_C = 200\text{mA}, I_B = 40\text{mA}$		4.0		4.0	V
h_{FE}	$V_{CE} = 10V, I_C = 200\text{mA}$	30	90	30	90	
h_{ie}	$V_{CE} = 10V, I_B = 8.0\text{mA}$		0.5		0.5	k Ω



NJ Semi-Conductors reserves the right to change test conditions, parameters limits and package dimensions without notice information furnished by NJ Semi-Conductors is believed to be both accurate and reliable at the time of going to press. However NJ Semi-Conductors assumes no responsibility for any errors or omissions discovered in its use. NJ Semi-Conductors encourages customers to verify that datasheets are current before placing orders.

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