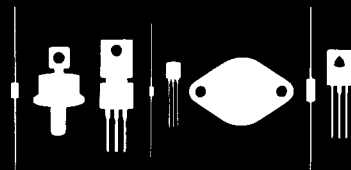


Central
Semiconductor Corp.

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145 Adams Avenue
Hauppauge, New York 11788



2N3641 PN3641
2N3642 PN3642
2N3643 PN3643

JEDEC TO-105 JEDEC TO-92

NPN SILICON SIGNAL TRANSISTORS

DESCRIPTION

The CENTRAL SEMICONDUCTOR 2N3641, PN3641 Series types are Silicon NPN Small Signal Transistors designed for general purpose amplifier applications.

MAXIMUM RATINGS (T_A=25°C)

	<u>SYMBOL</u>	<u>2N3641 2N3643 PN3641 PN3643</u>	<u>2N3642 PN3642</u>	<u>UNIT</u>
Collector-Base Voltage	V _{CB0}	60	60	V
Collector-Emitter Voltage	V _{CEO}	30	45	V
Emitter-Base Voltage	V _{EBO}	5.0	5.0	V
Collector Current	I _C	500	500	mA
		<u>2N3641 2N3642 2N3643</u>	<u>PN3641 PN3642 PN4643</u>	
Power Dissipation Operating and Storage	P _D	350	625	mW
Junction Temperature	T _J , T _{stg}	-55 TO +125	-55 TO +150	°C

ELECTRICAL CHARACTERISTICS (T_A=25°C)

<u>SYMBOL</u>	<u>TEST CONDITIONS</u>	<u>2N3641 PN3641 MIN MAX</u>	<u>2N3642 PN3642 MIN MAX</u>	<u>2N3643 PN3643 MIN MAX</u>	<u>UNIT</u>
I _{CES}	V _{CE} =50V	50	50	50	nA
BV _{CB0}	I _C =10μA	60	60	60	V
BV _{CES}	I _C =10μA	60	60	60	V
BV _{CEO}	I _C =10mA	30	45	30	V
BV _{EBO}	I _E =10μA	5.0	5.0	5.0	V
V _{CE(SAT)}	I _C =150mA, I _B =15mA	0.22	0.22	0.22	V
h _{FE}	V _{CE} =10V, I _C =150mA	40 120	40 120	100 300	
h _{FE}	V _{CE} =10V, I _C =500mA	15	15	25	
f _T	V _{CE} =5.0V, I _C =50mA, f=100MHz	150	150	250	MHz
C _{ob}	V _{CB} =10V, f=140kHz	8.0	8.0	8.0	pF
G _{pe}	V _{CE} =15V, R _G =140Ω, R _L =260Ω, f=30MHz, P _{IN} =40mW	10	10	10	dB
η	V _{CE} =15V, R _G =140Ω, R _L =260Ω, f=30MHz, P _{IN} =40mW	60	60	60	%
t _{on}	I _C =300mA, I _{B1} =30mA	60	60	60	ns
t _{off}	I _C =300mA, I _{B1} =I _{B2} =30mA	150	150	150	ns

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