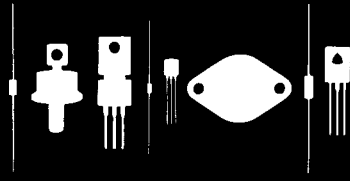


Central
Semiconductor Corp.

**Central
Semiconductor Corp.**
**Central™
Semiconductor Corp.**

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)

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

ELECTRICAL CHARACTERISTICS (T_A=25°C)

SYMBOL	TEST CONDITIONS	2N3641	2N3642	2N3643	UNIT	
		PN3641	PN3642	PN3643		
		MIN	MAX	MIN	MAX	
I _{CES}	V _{CE} =50V		50		50	nA
BV _{CBO}	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	V
h _{FE}	V _{CE} =10V, I _C =150mA	40	120	40	120	
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	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	ns
t _{off}	I _C =300mA, I _{B1} =I _{B2} =30mA		150		150	ns