Central
Semiconductor Corp.
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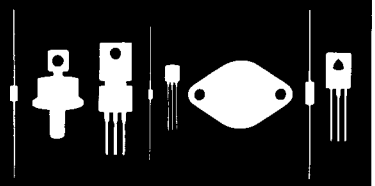
145 Adams Avenue
Hauppauge, New York 11788



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)

	SYMBOL	2N3641 2N3643 PN3641 PN3643	2N3642 PN3642	UNIT
Collector-Base Voltage	V_{CBO}	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
		2N3641 2N3642 2N3643	PN3641 PN3642 PN4643	
Power Dissipation	P_D	350	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 PN3641 MIN	MAX	2N3642 PN3642 MIN	MAX	2N3643 PN3643 MIN	MAX	UNIT
I_{CES}	V_{CE}=50V		50		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		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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