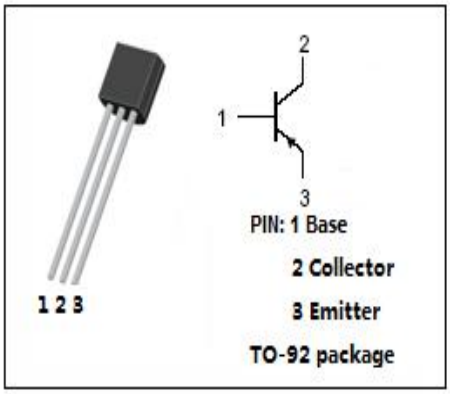
isc Silicon PNP Power Transistor 2N3906

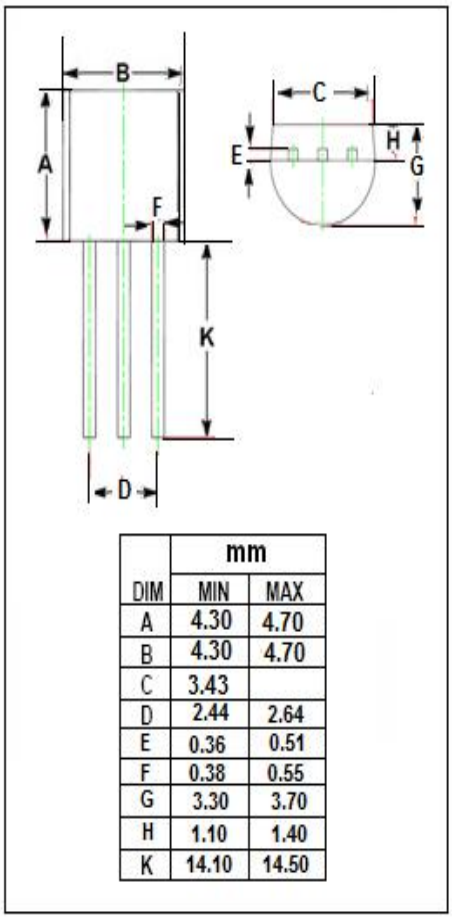
DESCRIPTION

- Low voltage(max .40V)
- Low current (max .200mA)
- NPN complement to Type 2N3904.
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



APPLICATIONS

- Designed for high-speed switching
- Amplifier applications.



DIM	mm MIN	mm MAX
A	4.30	4.70
B	4.30	4.70
C	3.43	
D	2.44	2.64
E	0.36	0.51
F	0.38	0.55
G	3.30	3.70
H	1.10	1.40
K	14.10	14.50

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-40	V
V_{CEO}	Collector-Emitter Voltage	-40	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current-Continuous	-200	mA
I_{CM}	Collector Current-Peak	-300	mA
I_{BM}	Peak base current	-100	mA
Ptot	Total Power Dissipation	-500	mW
T_J	Junction Temperature	-65~150	℃
T_{stg}	Storage Temperature	-65~150	℃

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}a}$	thermal resistance from junction to ambient	250	K/W

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{(BR)CBO}$	Collector-base breakdown voltage	I_C=-10mA, I_E=0	-40		V
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	I_C= -1mA , I_B=0	-40		V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	I_E= -10mA, I_C=0	-5		V
$V_{CE(sat)1}$	Collector-Emitter Saturation Voltage	I_C= -10mA; I_B= -1mA		-0.2	V
$V_{CE(sat)2}$	Collector-Emitter Saturation Voltage	I_C= -50mA; I_B= -5mA		-0.2	V
$V_{BE(sat)1}$	base-emitter saturation voltage	I_C= -10mA; I_B=-1mA		-0.85	V
$V_{CE(sat)2}$	Collector-Emitter Saturation Voltage	I_C= -50mA; I_B= -5mA		-0.95	V
I_{CBO}	collector cut-off current	V_{CB} =-30 V,I_E = 0		-0.05	μA
I_{EBO}	Emitter Cutoff Current	V_{EB}=-6V; I_C=0		-0.05	μA
h_{FE-1}	DC Current Gain	I_C= -0.1 mA ; V_{CE}= -1V	60		
h_{FE-2}	DC Current Gain	I_C=- 1 mA ; V_{CE}=-1V	80		
h_{FE-3}	DC Current Gain	I_C= -10 mA ; V_{CE}=-1V	100	300	
h_{FE-4}	DC Current Gain	I_C= -50 mA ; V_{CE}=-1V	60		
h_{FE-5}	DC Current Gain	I_C=-100 mA ; V_{CE}=-1V	30		