

isc Silicon PNP Power Transistor

ISCE18121

DESCRIPTION

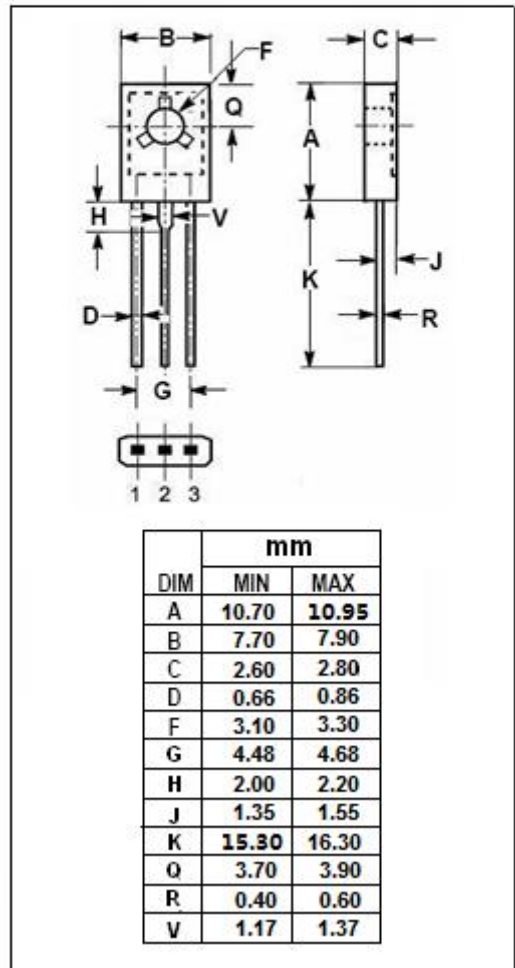
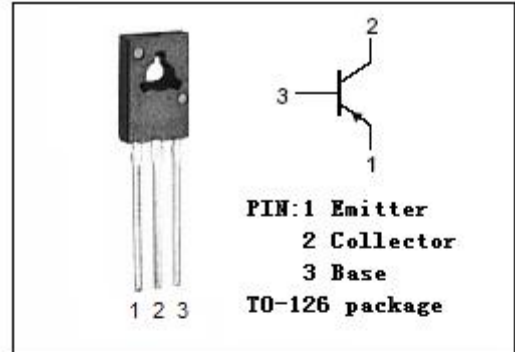
- High Collector Current $-I_C = -4A$
- High Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = -30V(\text{Min})$
- Good Linearity of h_{FE}
- Low Saturation Voltage

APPLICATIONS

- Designed for use in the output stage of 3 watts audio amplifier, voltage regulator, DC-DC converter and relay driver.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-40	V
V_{CEO}	Collector-Emitter Voltage	-30	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current-Continuous	-4	A
I_{CP}	Collector Current-Pulse	-10	A
P_C	Collector Power Dissipation @ $T_C=25^\circ\text{C}$	30	W
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^\circ\text{C}$



isc Silicon PNP Power Transistor**ISCE18121****ELECTRICAL CHARACTERISTICS** $T_C=25^{\circ}\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = -2A; I_B = -0.2A$			-0.5	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C = -2A; I_B = -0.2A$			-2.0	V
I_{CBO}	Collector Cutoff Current	$V_{CB} = -30V; I_E = 0$			-1.0	μA
I_{EBO}	Emitter Cutoff Current	$V_{EB} = -3V; I_C = 0$			-1.0	μA
h_{FE-1}	DC Current Gain	$I_C = -20mA; V_{CE} = -2V$	30			
h_{FE-2}	DC Current Gain	$I_C = -1A; V_{CE} = -2V$	60		400	
f_T	Current-Gain—Bandwidth Product	$I_C = -0.1A; V_{CE} = -5V$		80		MHz
C_{OB}	Output Capacitance	$I_E = 0; V_{CB} = -10V, f_{test} = 1\text{MHz}$		55		pF

◆ **h_{FE-2} Classifications**

R	Q	P	E
60-120	100-200	160-320	200-400