

DESCRIPTION

- Collector-Emitter Sustaining Voltage-
: $V_{CE(sat)} = -0.6V(\text{Max.}) @ I_C = -1.5A$
- Collector-Emitter Sustaining Voltage-
: $V_{CEO(SUS)} = -45V(\text{Min})$
- Complement to Type 2N6121

APPLICATIONS

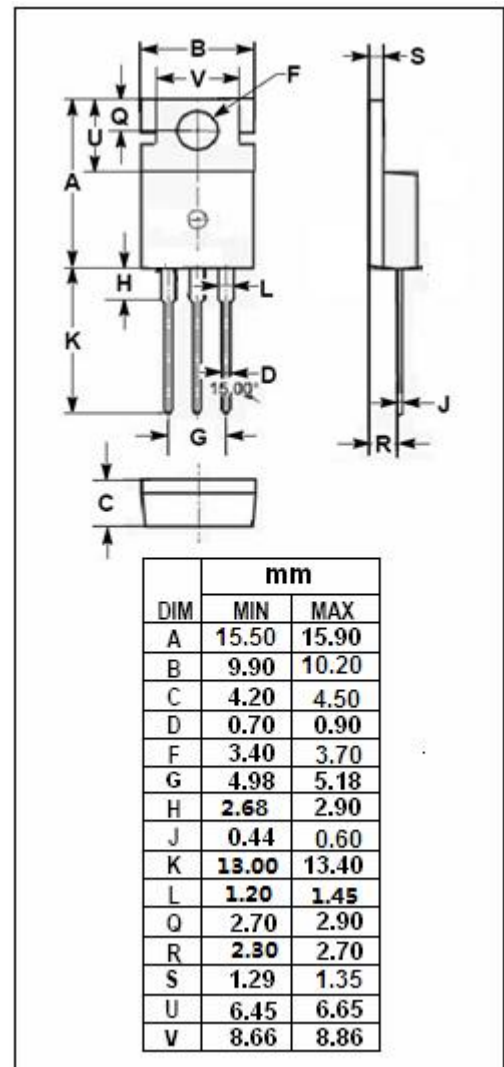
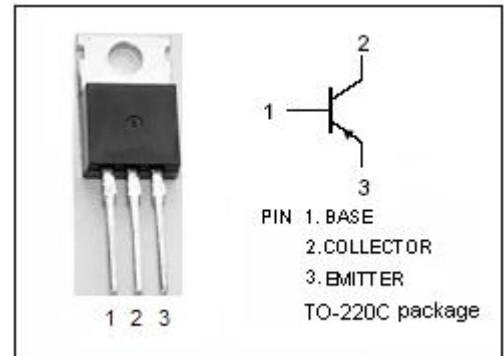
- Designed for use in power amplifier and switching circuits applications

ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{CBO}	Collector-Base Voltage	-45	V
V _{CEO}	Collector-Emitter Voltage	-45	V
V _{EBO}	Emitter-Base Voltage	-5	V
I _C	Collector Current-Continuous	-4	A
I _{CM}	Collector Current-Peak	-8	A
I _B	Base Current	-1	A
P _C	Collector Power Dissipation @ T _C =25°C	40	W
T _J	Junction Temperature	150	°C
T _{stg}	Storage Temperature Range	-65~150	°C

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance, Junction to Case	3.125	°C/W



SPTECH Silicon PNP Power Transistor

2N6124

ELECTRICAL CHARACTERISTICS

$T_C=25^\circ\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage	$I_C = -50\text{mA}; I_B = 0$	-45		V
$V_{CE(sat)-1}$	Collector-Emitter Saturation Voltage	$I_C = -1.5\text{A}; I_B = -0.15\text{A}$		-0.6	V
$V_{CE(sat)-2}$	Collector-Emitter Saturation Voltage	$I_C = -4\text{A}; I_B = -1.0\text{A}$		-1.4	V
$V_{BE(on)}$	Base-Emitter On Voltage	$I_C = -1.5\text{A}; V_{CE} = -2\text{V}$		-1.2	V
I_{CEX}	Collector Cutoff Current	$V_{CE} = -45\text{V}; V_{BE(off)} = -1.5\text{V}$ $V_{CE} = -45\text{V}; V_{BE(off)} = -1.5\text{V}; T_C = 150^\circ\text{C}$		-0.1 -2.0	mA
I_{CEO}	Collector Cutoff Current	$V_{CE} = -45\text{V}; I_B = 0$		-1.0	mA
I_{EBO}	Emitter Cutoff Current	$V_{EB} = -5\text{V}; I_C = 0$		-1.0	mA
h_{FE-1}	DC Current Gain	$I_C = -1.5\text{A}; V_{CE} = -2\text{V}$	25	100	
h_{FE-2}	DC Current Gain	$I_C = -4\text{A}; V_{CE} = -2\text{V}$	10		
f_T	Current-Gain—Bandwidth Product	$I_C = -1.0\text{A}; V_{CE} = -4\text{V}; f_{test} = 1.0\text{MHz}$	2.5		MHz