

SPTECH Silicon PNP Power Transistor

TIP36

DESCRIPTION

- DC Current Gain-
: $h_{FE} = 25(\text{Min}) @ I_C = -1.5\text{A}$
- Collector-Emitter Sustaining Voltage-
: $V_{CEO(\text{SUS})} = -40\text{V}(\text{Min})$
- Complement to Type TIP35
- Current Gain-Bandwidth Product-
: $f_T = 3.0\text{MHz}(\text{Min}) @ I_C = -1.0\text{A}$

APPLICATIONS

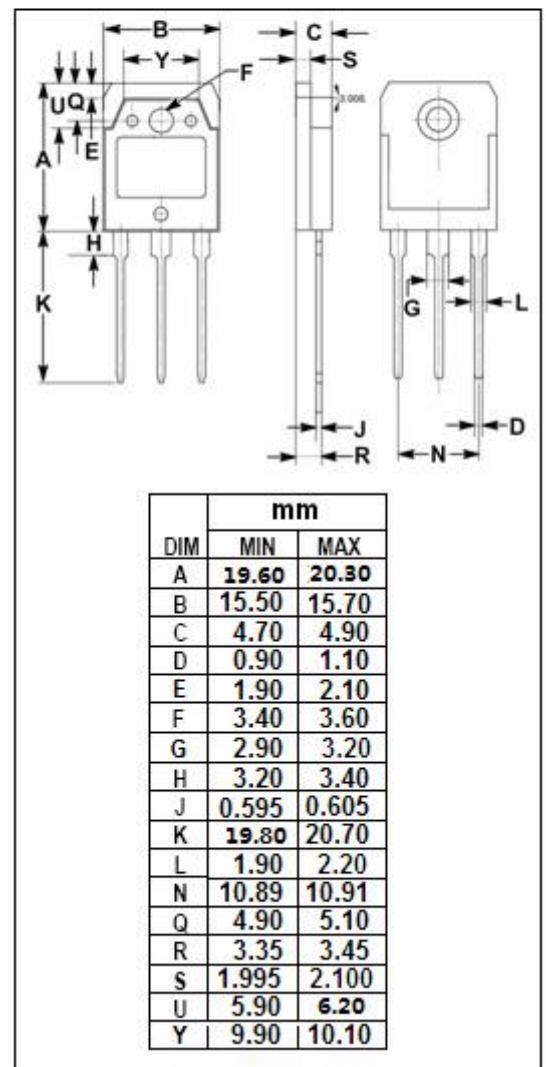
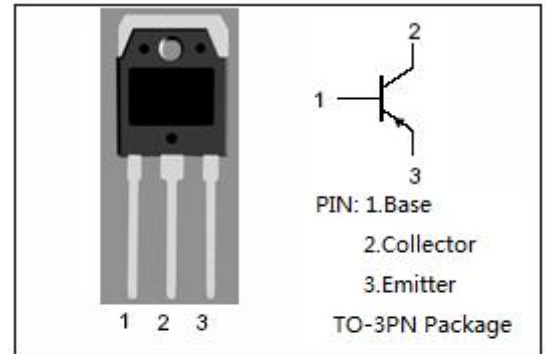
- Designed for use in general purpose power amplifier and switching applications.

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	-40	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current-Continuous	-25	A
I_{CM}	Collector Current-peak	-40	A
I_B	Base Current	-5	A
P_C	Collector Power Dissipation@ $T_c = 25^\circ\text{C}$	125	W
T_j	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-65~150	$^\circ\text{C}$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	1.0	$^\circ\text{C}/\text{W}$



ELECTRICAL CHARACTERISTICS**T_c=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V _{CEO(SUS)}	Collector-Emitter Sustaining Voltage	I _C = -30mA ; I _B = 0	-40		V
V _{CE(sat)} -1	Collector-Emitter Saturation Voltage	I _C = -15A ; I _B = -1.5A		-1.8	V
V _{CE(sat)} -2	Collector-Emitter Saturation Voltage	I _C = -25A ; I _B = -5A		-4.0	V
V _{BE(on)} -1	Base-Emitter On Voltage	I _C = -15A ; V _{CE} = -4V		-2.0	V
V _{BE(on)} -2	Base-Emitter On Voltage	I _C = -25A ; V _{CE} = -4V		-4.0	V
I _{CEO}	Collector Cutoff Current	V _{CE} = -30V ; I _B = 0		-1.0	mA
I _{CBO}	Collector Cutoff Current	V _{CB} = -40V ; I _E = 0		-0.7	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = -5V ; I _C = 0		-1.0	mA
h _{FE-1}	DC Current Gain	I _C = -1.5A ; V _{CE} = -4V	25		
h _{FE-2}	DC Current Gain	I _C = -15A ; V _{CE} = -4V	15	75	
f _T	Current-Gain—Bandwidth Product	I _C = -1A ; V _{CE} = -10V ; f _{test} = 1.0MHz	3		MHz