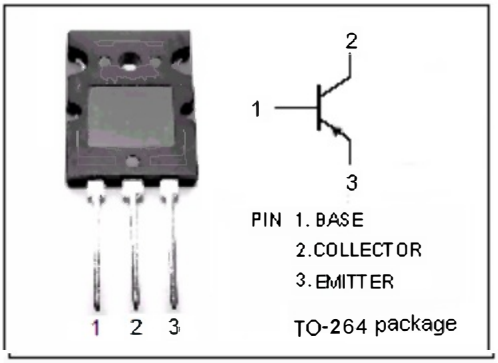
SPTECH Silicon PNP Power Transistor

MJL21193



DESCRIPTION

- Total Harmonic Distortion Characterized
- High DC Current Gain
- High Area of Safe Operation

APPLICATIONS

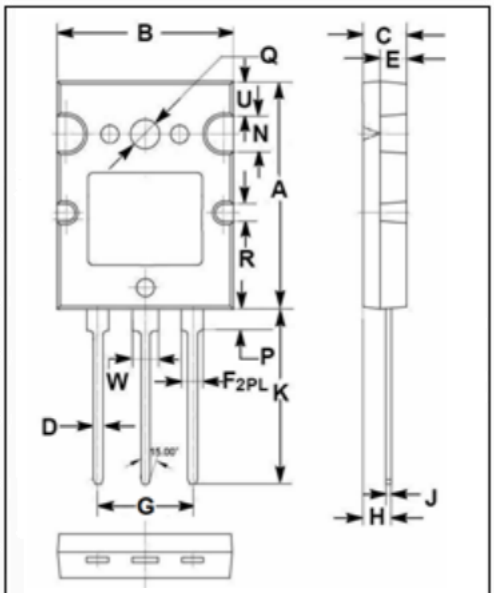
- Designed for high power audio output, disk head positioners and linear applications.

ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Emitter Voltage	-400	V
V_{CEO}	Collector-Emitter Voltage	-250	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current-Continuous	-16	A
I_{CM}	Collector Current-Pulsed	-30	A
I_B	Base Current-Continuous	-5	A
P_D	Total Power Dissipation (T_C=25℃)	200	W
T_j	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-65~150	℃

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	VALUE	UNIT
$R_{th\ j\text{-}C}$	ThermalResistance Junction To Case	0.7	℃/W



DIM	mm MIN	MAX
A	25.50	26.50
B	19.80	20.20
C	4.50	5.50
D	0.90	1.10
E	2.80	3.20
F	2.40	2.60
G	10.80	11.00
H	3.10	3.30
J	0.50	0.70
K	20.00	21.00
N	3.90	4.10
P	2.40	2.60
Q	3.10	3.50
R	1.90	2.10
U	3.90	4.10
W	2.90	3.10

SPTECH Silicon PNP Power Transistor

ELECTRICAL CHARACTERISTICS

Tj=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage	I_C=-100mA; I_B=0	-250			V
$V_{CE(sat)-1}$	Collector-Emitter Saturation Voltage	I_C=-8A ;I_B=-0.8A			-1.4	V
$V_{CE(sat)-2}$	Collector-Emitter Saturation Voltage	I_C=-16A ;I_B=-3.2A			-4	V
$V_{BE(on)}$	Base-Emitter On Voltage	I_C=-8A ; V_{CE}=-5V			-2.2	V
I_{CEO}	Collector Cutoff Current	V_{CE}=-200V,I_B=0			-0.1	mA
I_{CEX}	Collector Cutoff Current	V_{CE}= -250V; $V_{BE(off)}$= -1.5V			-0.1	mA
I_{EBO}	Emitter Cutoff Current	V_{EB}=-5V; I_C=0			-1	μ A
h_{FE-1}	DC Current Gain	I_C=-8A; V_{CE}=-5V	25		75	
h_{FE-2}	DC Current Gain	I_C=-16A; V_{CE}=-5V	8			
C_{OB}	Collector Capacitance	I_E= 0; f=1MHz ; V_{CB}=-10V			500	pF
f_T	Current Gain-Bandwidth Product	I_C=-1A ;V_{CE}=-10V; f_{test}=1MHz	4			MHz