

isc Silicon PNP Power Transistor

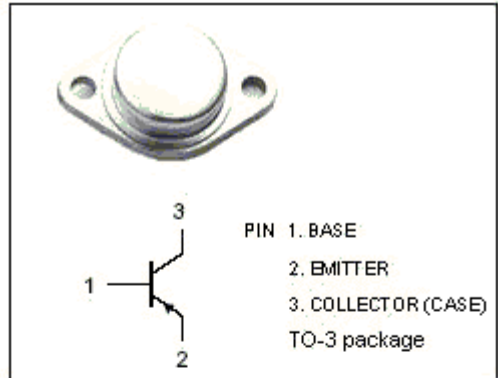
MJ21193

DESCRIPTION

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

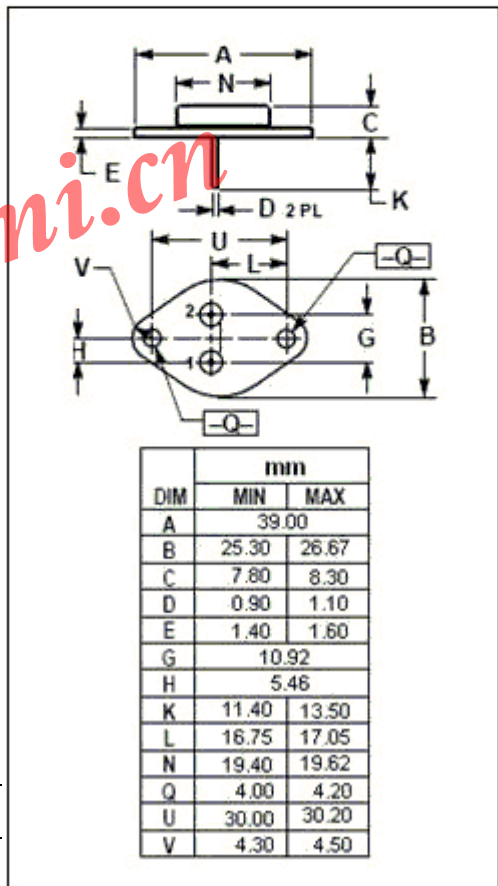
APPLICATIONS

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



ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

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°C)	250	W
T _j	Junction Temperature	200	°C
T _{stg}	Storage Temperature	-65~200	°C



THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	VALUE	UNIT
R _{th j-c}	Thermal Resistance Junction To Case	0.7	°C/W

isc Silicon PNP Power Transistor

MJ21193

ELECTRICAL CHARACTERISTICS

T_j=25°C 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			-100	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