

DESCRIPTION

- Complement to Type NPN MJ15022/ 15024
- Excellent Safe Operating Area
- High DC current Gain

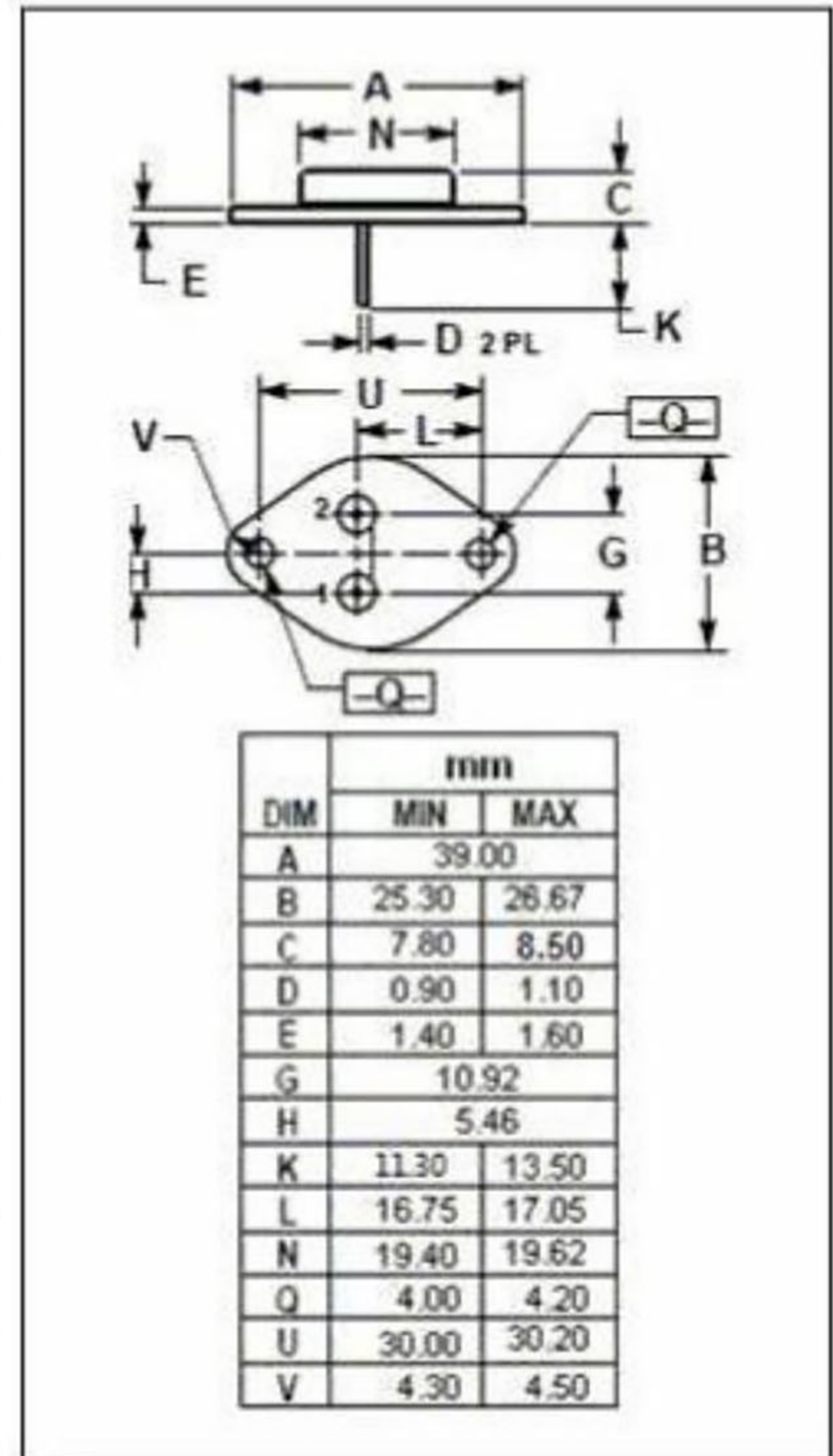
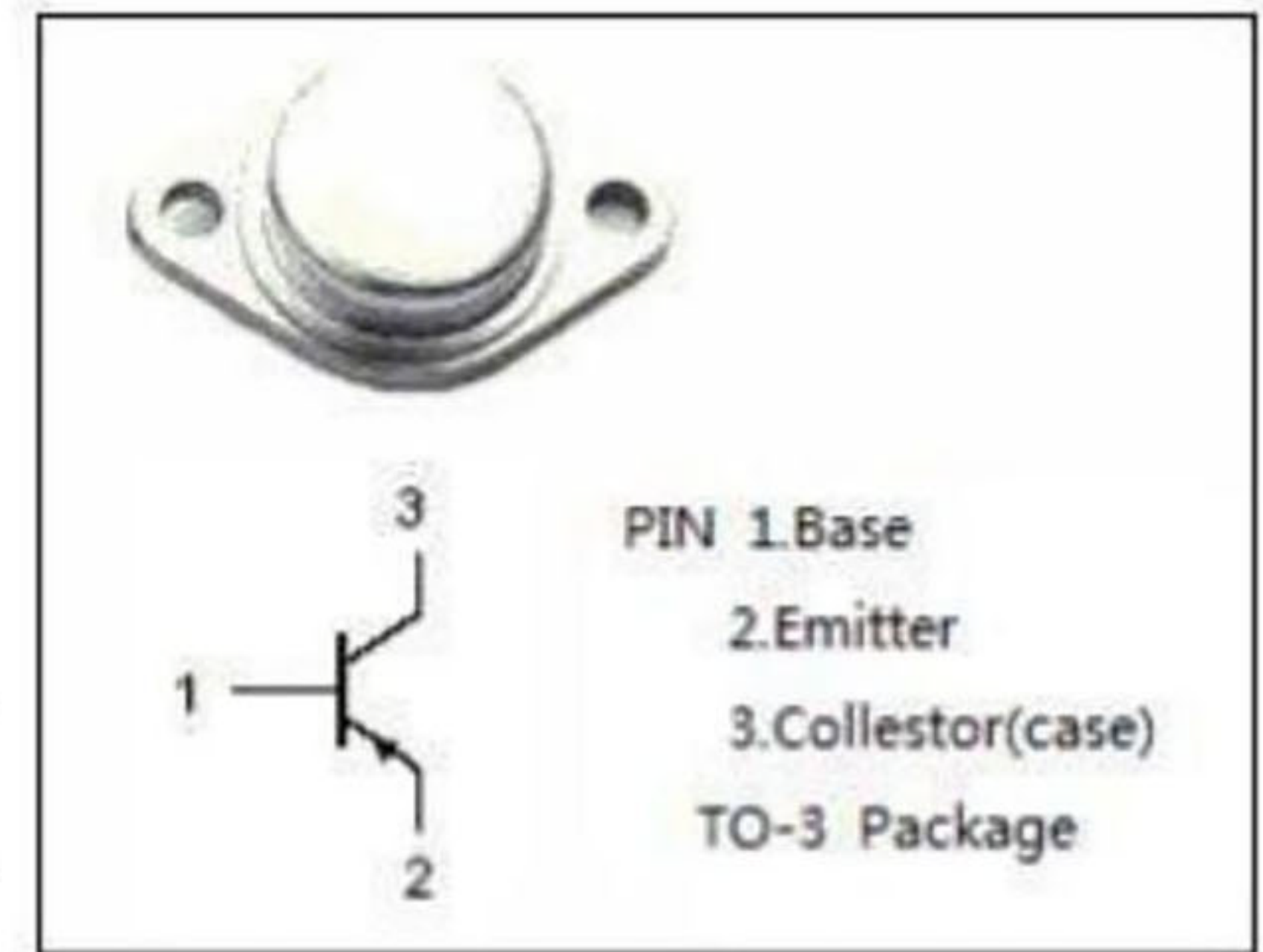
APPLICATIONS

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

ABSOLUTE MAXIMUM RATINGS(T_c= 25 C)

SYMBOL	PARAMETER	VALUE	UNIT	
V _{CB0}	Collector- Base Voltage	MJ15025	-400	V
V _{CEO}	Collector- Emitter Voltage	MJ15025	-250	V
V _{EBO}	Emitter- Base Voltage		-5	V
I _c	Collector Current- Continuous		-16	A
(1) I _{CM}	Collector Current- Peak		-30	A
I _B	Base Current- Continuous		-5	A
P _D	Total Power Dissipation @ T _c =25 C		250	W
T _j	Junction Temperature		-65~200	C
T _{stg}	Storage Temperature		-65~200	C
SYMBOL	PARAMETER	MAX	UNIT	
R _{th j-c}	Thermal Resistance, Junction to Case	0.70	C/ W	

(1) Pulse Test: Pulse Width = 5 ms, Duty Cycle _ 10%.



ELECTRICAL CHARACTERISTICS

T_c= 25 C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V _{CEO(SUS)} (1)	Collector- Emitter Sustaining Voltage	MJ15025 I _c = -50mA ; 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		-4.0	V
V _{BE(on)}	Base- Emitter On Voltage	I _c = -8A ; V _{CE} = -4V		-2.2	V
I _{CEO}	Collector Cutoff Current	MJ15023 V _{CE} = -150V ; I _B = 0		-0.5	mA
		MJ15025 V _{CE} = -200V ; I _B = 0			
I _{CBO}	Collector Cutoff Current	MJ15023 V _{CB} = -200V ; I _E = 0		-0.25	mA
		MJ15025 V _{CB} = -250V ; I _E = 0			
I _{EBO}	Emitter Cutoff Current	V _{EB} = -5V ; I _C =0		-0.5	mA
h _{FE-1}	DC Current Gain	I _C = -8A ; V _{CE} = -4V	15	60	
h _{FE-2}	DC Current Gain	I _C = -16A ; V _{CE} = -4V	5		
I _{s/b}	Second Breakdown Collector Current With Base Forward Biased	V _{CE} = -50Vdc, t=0.5 s, Nonrepetitive V _{CE} = -80Vdc, t=0.5 s, Nonrepetitive	-5.0	-2.0	A
C _{OB}	Output Capacitance	I _E = 0 ; V _{CB} = 10V ; f _{test} = 1.0MHz	300		PF
f _T	Current- Gain— Bandwidth Product	I _C = -1A ; V _{CE} = -10V ; f _{test} = 1.0MHz	4		MHz

(1) Pulse Test: Pulse Width = 5 ms, Duty Cycle _ 10%.