Silicon NPN Power Transistors 2N6654

DESCRIPTION

·With TO-3 package
·High voltage capability
·Fast switching speeds
·Low saturation voltage

APPLICATIONS

·Switcing regulators
·Inverters
·Solenoid and relay drivers
·Deflection circuits

PINNING (See Fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

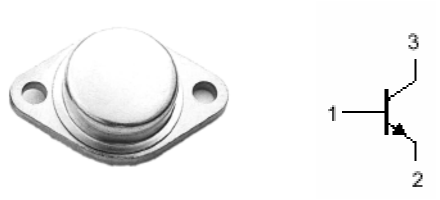

Fig.1 simplified outline (TO-3) and symbol

MAXIMUN RATINGS(Ta=25□)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	500	V
V_{CEO}	Collector-emitter voltage	Open base	350	V
V_{EBO}	Emitter-base voltage	Open collector	6	V
I_C	Collector current		20	A
I_{CM}	Collector current-peak		30	A
P_T	Total power dissipation	T_c=25□	150	W
T_j	Junction temperature		200	□
T_{stg}	Storage temperature		-65~200	□

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal resistance from junction to case	1.0	□/W

CHARACTERISTICS

Tj=25□ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	Collector-emitter sustaining voltage	I_C=0.1A ; I_B=0	350			V
$V_{(BR)CBO}$	Collector-emitter breakdown voltage	I_C=1mA ; I_E=0	500			V
$V_{CEsat-1}$	Collector-emitter saturation voltage	I_C=10A; I_B=2A			1.8	V
$V_{CEsat-2}$	Collector-emitter saturation voltage	I_C=15A; I_B=3A			2.2	V
V_{BEsat}	Base-emitter saturation voltage	I_C=15A; I_B=3A			1.8	V
I_{CEV}	Collector cut-off current	V_{CE}=500V;$V_{BE(off)}$=-1.5V T_C=150□			0.1 2.0	mA
I_{EBO}	Emitter cut-off current	V_{EB}=6V; I_C=0			0.1	mA
h_{FE-1}	DC current gain	I_C=1A ; V_{CE}=5V	15		50	
h_{FE-2}	DC current gain	I_C=10A ; V_{CE}=15V	10			

PACKAGE OUTLINE

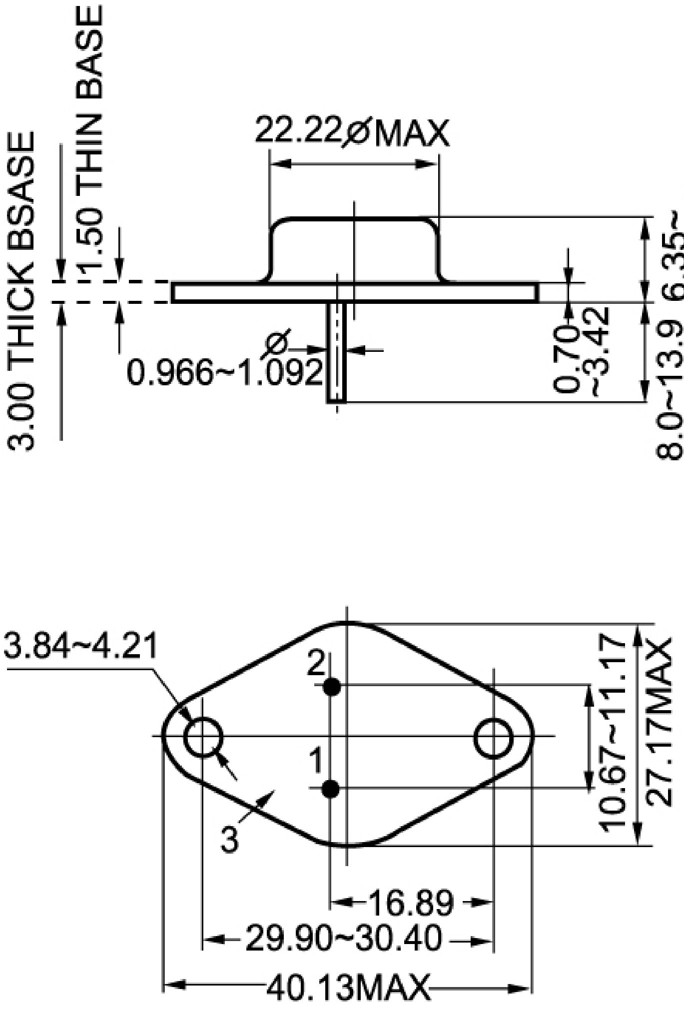

Fig.2 Outline dimensions