Silicon NPN Power Transistors 2N3584

DESCRIPTION

·With TO-66 package
·Continuous collector current-I_C=2A
·Power dissipation -P_D=35W @T_C=25□
·$V_{CE(SAT)}$=0.75V(Max)@I_C=1A;I_B=0.125A

APPLICATIONS

·High speed switching and linear amplification
·High-voltage operational amplifiers
·Switching regulators ,converters
·Deflection stages and high fidelity amplifers

Fig.1 simplified outline (TO-66) and symbol

PINNING (See Fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

ABSOLUTE MAXIMUM RATINGS(Ta=25□)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	375	V
V_{CEO}	Collector-emitter voltage	Open base	250	V
V_{EBO}	Emitter-base voltage	Open collector	6	V
I_C	Collector current		2	A
I_{CM}	Collector current-Peak		5	A
I_B	Base current		1	A
P_T	Total power dissipation	T_C=25□	35	W
T_j	Junction temperature		200	□
T_{stg}	Storage temperature		-65~200	□

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{(th)\,jc}$	Thermal resistance junction to case	5.0	□/W

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CHARACTERISTICS

Tj=25□ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	Collector-emitter sustaining voltage	I_C=0.2A ; I_B=0	250			V
$V_{CE(sat)}$	Collector-emitter saturation voltage	I_C=1A; I_B=0.125A			0.75	V
$V_{BE(sat)}$	Base-emitter saturation voltage	I_C=1A ;I_B=0.1A			1.4	V
$V_{BE(on)}$	Base -emitter on voltage	I_C=1A ; V_{CE}=10V			1.4	V
I_{CEX}	Collector cut-off current	V_{CE}=340V;$V_{BE(off)}$=1.5V V_{CE}=300V;$V_{BE(off)}$=1.5V ;T_C=150□			1.0 3.0	mA
I_{CEO}	Collector cut-off current	V_{CE}=150V; I_B=0			5.0	mA
I_{EBO}	Emitter cut-off current	V_{EB}=6V; I_C=0			0.5	mA
h_{FE-1}	DC current gain	I_C=0.1A ; V_{CE}=10V	40			
h_{FE-2}	DC current gain	I_C=1A ; V_{CE}=2V	8		80	
h_{FE-3}	DC current gain	I_C=1A ; V_{CE}=10V	25		100	

PACKAGE OUTLINE

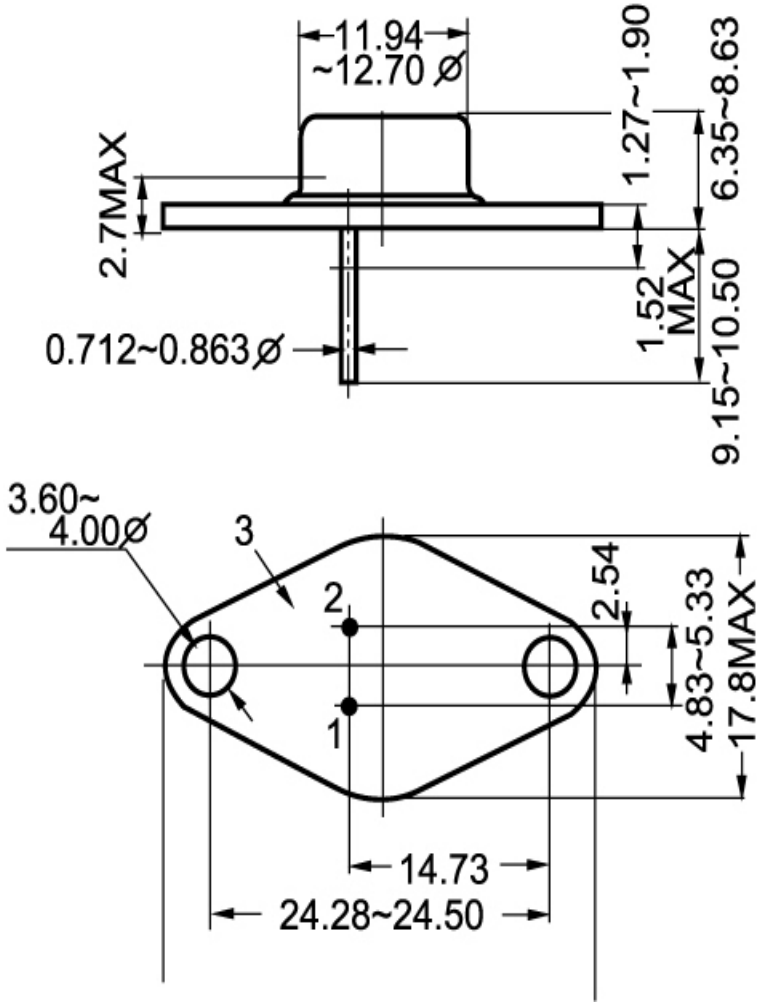

Fig.2 Outline dimensions