Silicon NPN Power Transistors 2N6372 2N6373 2N6374

DESCRIPTION

·With TO-66 package
·Low collector saturation voltage
·Excellent safe operating area

APPLICATIONS

·Designed for switching and wide-band amplifier applications

PINNING

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

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

Absolute maximum ratings(Ta=□)

SYMBOL	PARAMETER		CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	2N6372	Open emitter	90	V
		2N6373		70	
		2N6374		50	
V_{CEO}	Collector-emitter voltage	2N6372	Open base	80	V
		2N6373		60	
		2N6374		40	
V_{EBO}	Emitter-base voltage		Open collector	6	V
I_C	Collector current			6	A
P_D	Total Power Dissipation		T_C=25□	40	W
T_j	Junction temperature			150	□
T_{stg}	Storage temperature			-65~200	□

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	VALUE	UNIT
$R_{th\ j\text{-}c}$	Thermal resistance junction to case	4.37	□/W

CHARACTERISTICS

Tj=25□ unless otherwise specified

SYMBOL	PARAMETER		CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	Collector-emitter sustaining voltage	2N6372	I_C=0.1A ;I_B=0	80			V
		2N6373		60			
		2N6374		40			
$V_{CEsat-1}$	Collector-emitter saturation voltage		I_C=2A; I_B=0.2A			0.7	V
$V_{CEsat-2}$	Collector-emitter saturation voltage		I_C=6A; I_B=0.6A			1.2	V
$V_{BEsat-1}$	Base-emitter saturation voltage		I_C=2A; I_B=0.2A			1.2	V
$V_{BEsat-2}$	Base-emitter saturation voltage		I_C=6A; I_B=0.6A			2.0	V
I_{CEO}	Collector cut-off current	2N6372	V_{CE}=80V; I_B=0			0.1	mA
		2N6373	V_{CE}=60V; I_B=0				
		2N6374	V_{CE}=40V; I_B=0				
I_{CBO}	Collector cut-off current		V_{CB}=Rated V_{CB}; I_E=0			10	μA
I_{EBO}	Emitter cut-off current		V_{EB}=6V; I_C=0			0.1	mA
h_{FE}	DC current gain	2N6372	I_C=2A ; V_{CE}=2V	20		100	
		2N6373	I_C=2.5A ; V_{CE}=2V				
		2N6374	I_C=3A ; V_{CE}=2V				
f_T	Transition frequency		I_C=0.5A;V_{CE}=10V;f=1MHz		4		MHz

PACKAGE OUTLINE

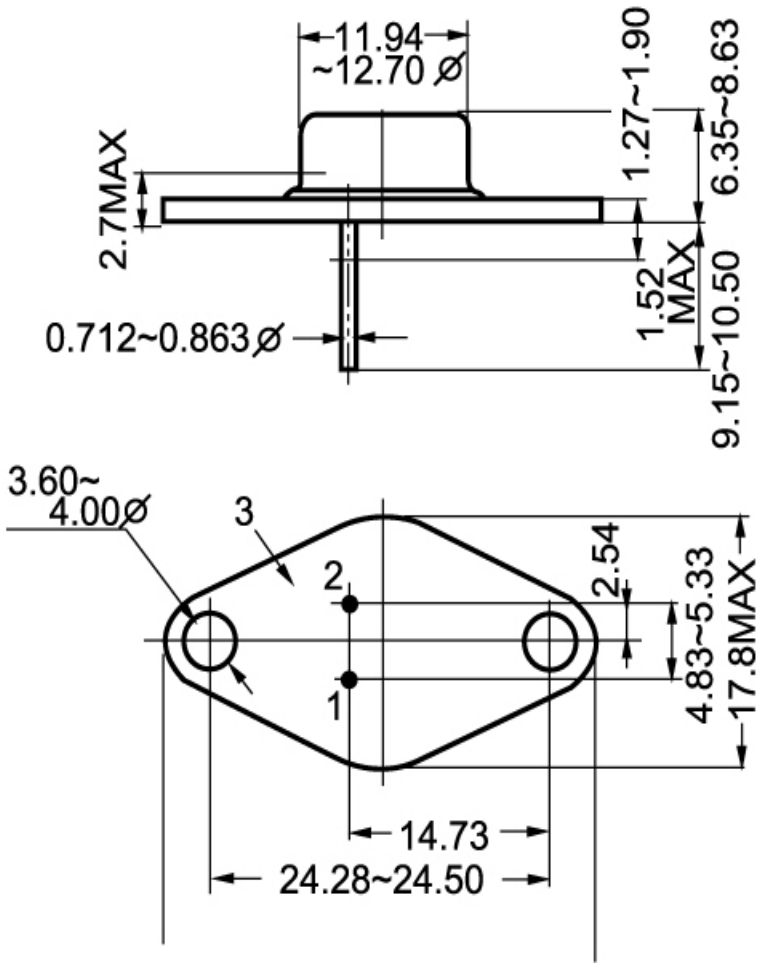

Fig.2 outline dimensions