Silicon NPN Power Transistors 2N6263 2N6264

DESCRIPTION

- ·With TO-66 package
- ·High breakdown voltage
- ·Low collector saturation voltage

APPLICATIONS

- ·A wide variety of medium-to-high power, high-voltage applications
- ·Series and shunt regulators
- ·High-fidelity amplifiers
- ·Power switching circuits
- ·Solenoid drivers

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	2N6263	Open emitter	140	V
		2N6264		170	
V_{CEO}	Collector-emitter voltage	2N6263	Open base	120	V
		2N6264		150	
V_{EBO}	Emitter-base voltage		Open collector	7	V
I_C	Collector current			3	A
I_{CM}	Collector current-peak			4	A
I_B	Base current			2	A
P_T	Total power dissipation	2N6263	T_C=25℃	20	W
		2N6264		50	
T_j	Junction temperature			150	℃
T_{stg}	Storage temperature			-65~200	℃

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER		MAX	UNIT
$R_{th\ j\text{-}C}$	Thermal resistance junction to case	2N6263	8.75	℃/W
		2N6264	3.5	

CHARACTERISTICS

Tj=25℃ unless otherwise specified

SYMBOL	PARAMETER		CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	Collector-emitter sustaining voltage	2N6263	I_C=0.1 A ; I_B=0	120			V
		2N6264		150			
V_{CEsat}	Collector-emitter saturation voltage	2N6263	I_C=0.5A; I_B=0.05A			1.2	V
		2N6264	I_C=1.0A; I_B=0.1A			0.5	
V_{BE}	Base -emitter on voltage	2N6263	I_C=0.5A ; V_{CE}=4V			2.0	V
		2N6264	I_C=1.0A ; V_{CE}=2V			1.5	
I_{CEX}	Collector cut-off current	2N6263	V_{CE}=120V; $V_{BE(off)}$=-1.5V T_C=150℃			2 10	mA
		2N6264	V_{CE}=150V; $V_{BE(off)}$=-1.5V T_C=150℃			0.05 1.0	
I_{CEO}	Collector cut-off current	2N6263	V_{CE}=100V;I_B=0			5	mA
		2N6264	V_{CE}=130V;I_B=0			1	
I_{EBO}	Emitter cut-off current	2N6263	V_{EB}=5V; I_C=0			2	mA
		2N6264	V_{EB}=7V; I_C=0			0.2	
h_{FE-1}	DC current gain	2N6263	I_C=0.5 A ; V_{CE}=4V	20		100	
		2N6264	I_C=1A ; V_{CE}=2V	20		60	
h_{FE-2}	DC current gain	2N6263	I_C=3A ; V_{CE}=2V	3			
		2N6264		5			
f_T	Transition frequency		I_C=0.2A ; V_{CE}=4V	200			KHz
$I_{s/b}$	Second breakdown collector current with base forward biased	2N6263	V_{CE}=120Vdc,t=1.0s, Nonrepetitive	0.167			A
		2N6264		0.417			

PACKAGE OUTLINE

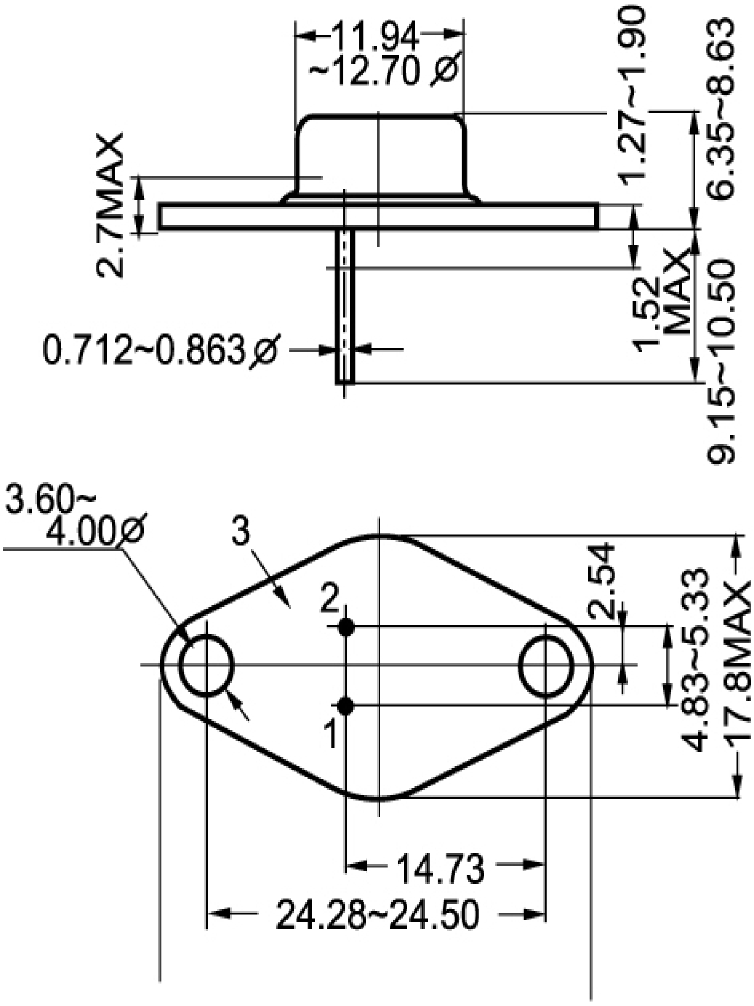

Fig.2 Outline dimensions