Silicon NPN Power Transistors 2N6282 2N6283 2N6284

DESCRIPTION

·With TO-3 package
·Complement to type 2N6285/6286/6287
·High DC current gain
·DARLINGTON

APPLICATIONS

·For use in general-purpose amplifier and low-frequency switching applications

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

PINNING

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

Absolute maximum ratings(Ta=□)

SYMBOL	PARAMETER		CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	2N6282	Open emitter	60	V
		2N6283		80	
		2N6284		100	
V_{CEO}	Collector-emitter voltage	2N6282	Open base	60	V
		2N6283		80	
		2N6284		100	
V_{EBO}	Emitter-base voltage		Open collector	5	V
I_C	Collector current			20	A
I_{CM}	Collector current-peak			40	A
I_B	Base current			0.5	A
P_D	Total Power Dissipation		T_C=25□	160	W
T_j	Junction temperature			200	□
T_{stg}	Storage temperature			-65~200	□

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	VALUE	UNIT
$R_{th\ j\text{-}c}$	Thermal resistance junction to case	1.09	□/W

CHARACTERISTICS

Tj=25□ unless otherwise specified

SYMBOL	PARAMETER		CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	Collector-emitter sustaining voltage	2N6282	I_C=0.2A ;I_B=0	60			V
		2N6283		80			
		2N6284		100			
$V_{CEsat-1}$	Collector-emitter saturation voltage		I_C=10A; I_B=40mA			2.0	V
$V_{CEsat-2}$	Collector-emitter saturation voltage		I_C=20A ;I_B=200mA			3.0	V
V_{BEsat}	Base-emitter saturation voltage		I_C=20A ;I_B=200mA			4.0	V
V_{BE}	Base-emitter on voltage		I_C=10A ; V_{CE}=3V			2.8	V
I_{CEO}	Collector cut-off current	2N6282	V_{CE}=30V; I_B=0			1.0	mA
		2N6283	V_{CE}=40V; I_B=0				
		2N6284	V_{CE}=50V; I_B=0				
I_{CEX}	Collector cut-off current	2N6282	V_{CE}=60V; V_{BE}=-1.5V T_C=150□			0.5 5.0	mA
		2N6283	V_{CE}=80V; V_{BE}=-1.5V T_C=150□			0.5 5.0	
		2N6284	V_{CE}=100V; V_{BE}=-1.5V T_C=150□			0.5 5.0	
I_{EBO}	Emitter cut-off current		V_{EB}=5V; I_C=0			2.0	mA
h_{FE-1}	DC current gain		I_C=10A ; V_{CE}=3V	750		18000	
h_{FE-2}	DC current gain		I_C=20A ; V_{CE}=3V	100			
C_{OB}	Output capacitance		I_E=0; V_{CB}=10V;f=1MHz			400	pF

PACKAGE OUTLINE

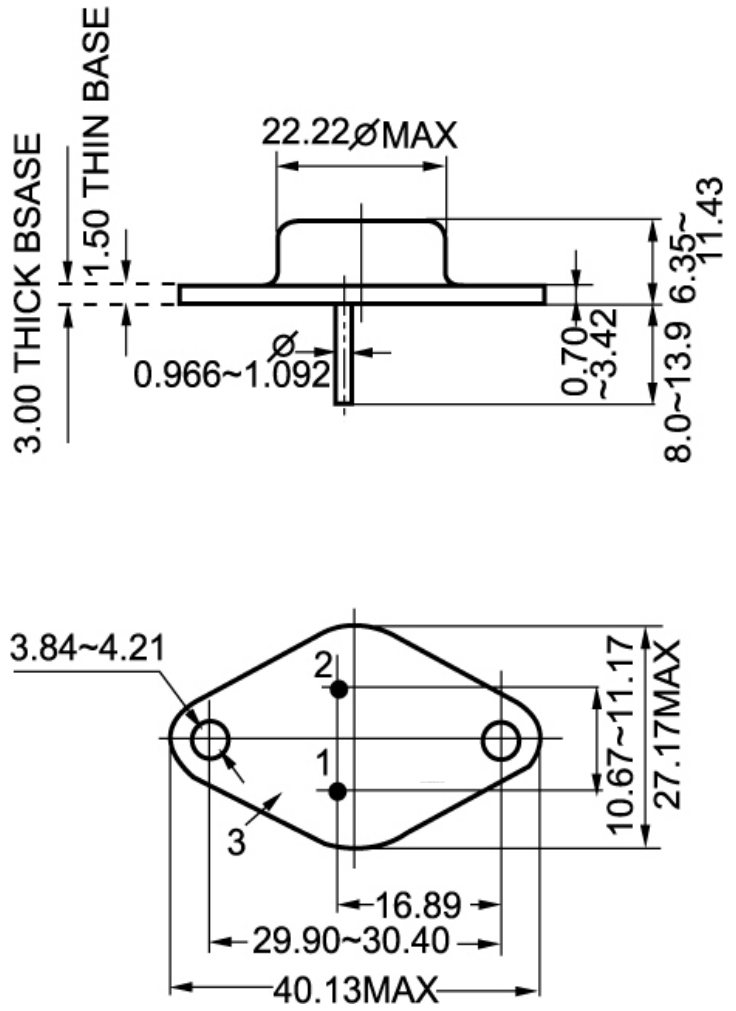

Fig.2 outline dimensions (unindicated tolerance:±0.10mm)