

Silicon NPN Power Transistors

2N6282 2N6283 2N6284

DESCRIPTION

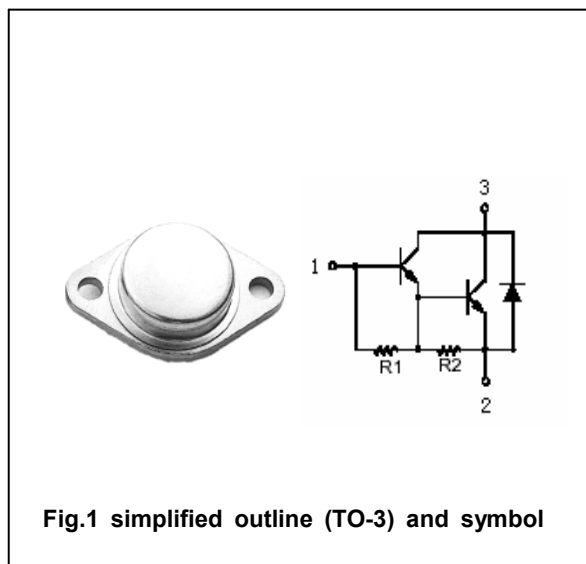
- With TO-3 package
- Complement to type 2N6285/6286/6287
- High DC current gain
- DARLINGTON

APPLICATIONS

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

PINNING

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

Absolute maximum ratings($T_a = \square$)

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		$T_C = 25\square$	160	W
T_j	Junction temperature			200	$\square$
T_{stg}	Storage temperature			-65~200	$\square$

THERMAL CHARACTERISTICS

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

Silicon NPN Power Transistors

2N6282 2N6283 2N6284

CHARACTERISTICS

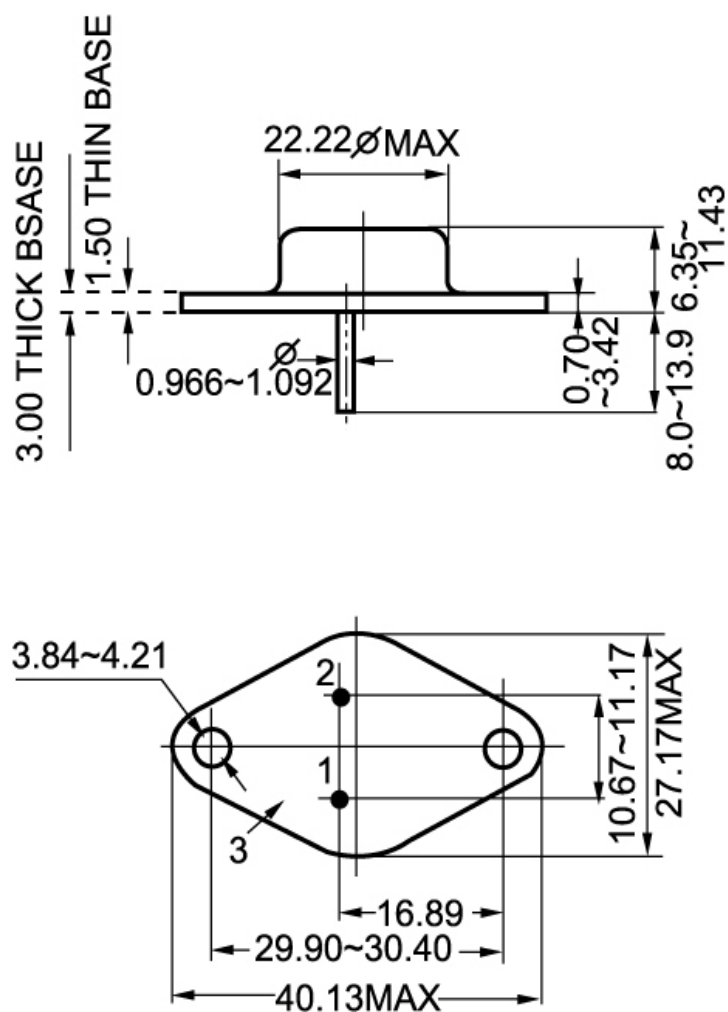
T_j=25°C unless otherwise specified

SYMBOL	PARAMETER		CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEQ(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°C			0.5 5.0	mA
		2N6283	V _{CE} =80V; V _{BE} =-1.5V T _C =150°C			0.5 5.0	
		2N6284	V _{CE} =100V; V _{BE} =-1.5V T _C =150°C			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

Silicon NPN Power Transistors

2N6282 2N6283 2N6284

PACKAGE OUTLINE

Fig.2 outline dimensions (unindicated tolerance: $\pm 0.10\text{mm}$)