

Inchange Semiconductor

Product Specification

Silicon NPN Power Transistors

2N6055 2N6056

DESCRIPTION

- With TO-3 package
- Low collector saturation voltage
- DARLINGTON
- Complement to type 2N6053;2N6054

APPLICATIONS

- General-purpose power amplifier and low frequency swithing applications

PINNING

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

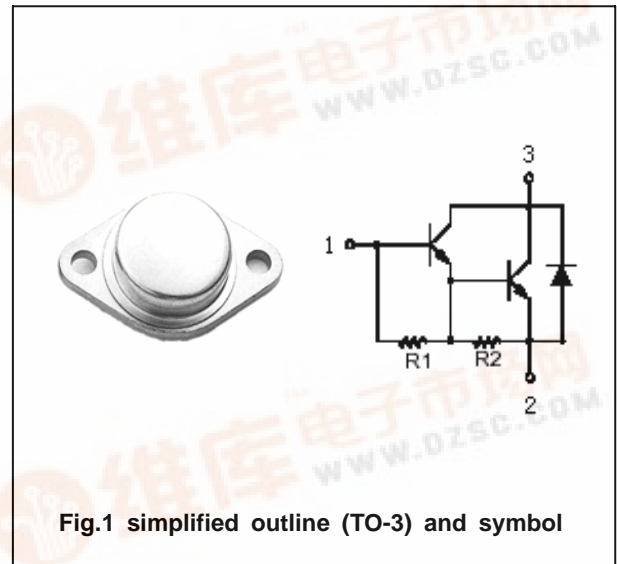


Fig.1 simplified outline (TO-3) and symbol

Absolute maximum ratings(Ta=°C)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V _{CBO}	Collector-base voltage	2N6055	60	V
		2N6056		
V _{CEO}	Collector-emitter voltage	2N6055	60	V
		2N6056		
V _{EBO}	Emitter-base voltage	Open collector	5	V
I _C	Collector current		8	A
I _{CM}	Collector current-peak		16	A
I _B	Base current		120	mA
P _D	Total Power Dissipation	T _C =25°C	100	W
T _j	Junction temperature		200	°C
T _{stg}	Storage temperature		-65~200	°C

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	VALUE	UNIT
R _{th j-c}	Thermal resistance junction to case	1.75	°C/W

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CHARACTERISTICS

T_m=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CE0(SUS)}	Collector-emitter sustaining voltage	2N6055	I _C =0.1 A ; I _B =0			V
		2N6056				
V _{CEsat-1}	Collector-emitter saturation voltage	I _C =4A ; I _B =16mA			2.0	V
V _{CEsat-2}	Collector-emitter saturation voltage	I _C =8A ; I _B =80mA			3.0	V
V _{BEsat}	Base-emitter saturation voltage	I _C =8A ; I _B =80mA			4.0	V
V _{BE}	Base-emitter on voltage	I _C =4A ; V _{CE} =3V			2.8	V
I _{CEO}	Collector cut-off current	2N6055	V _{CE} =30V; I _B =0		0.5	mA
		2N6056				
I _{CEX}	Collector cut-off current	2N6055	V _{CE} =60V; V _{BE(off)} =1.5V T _C =150°C		0.5 5.0	mA
		2N6056				
I _{EBO}	Emitter cut-off current	V _{EB} =5V; I _C =0			2.0	mA
h _{FE-1}	DC current gain	I _C =4A ; V _{CE} =3V	750		18000	
h _{FE-2}	DC current gain	I _C =8A ; V _{CE} =3V	100			
C _{ob}	Output capacitance	I _E =0; V _{CB} =10V; f=0.1MHz			220	pF

PACKAGE OUTLINE

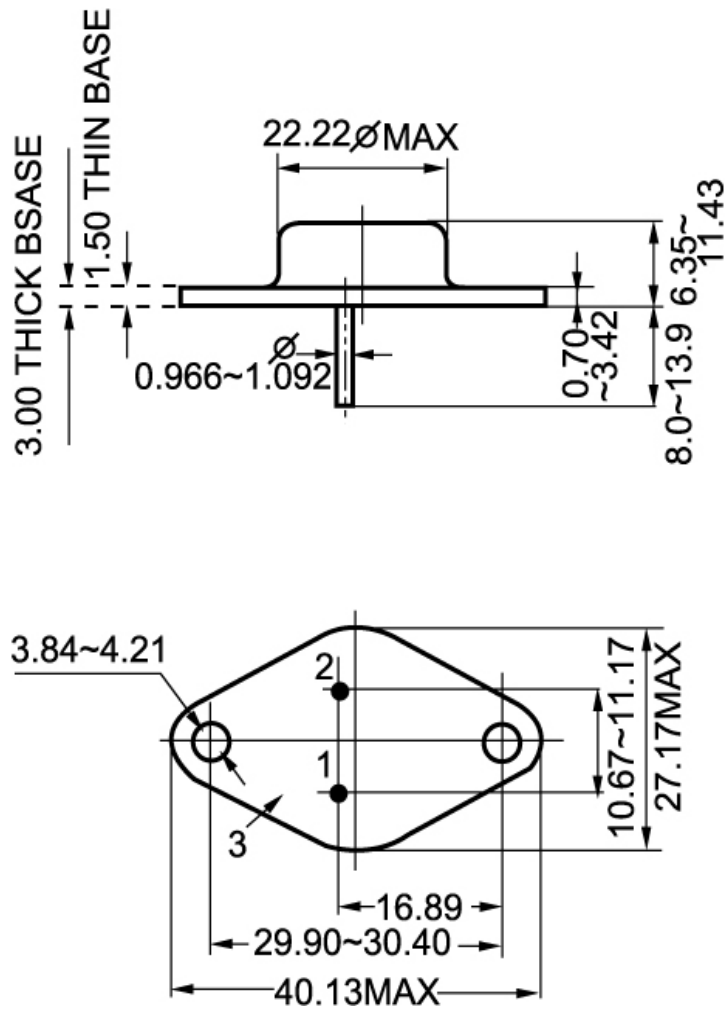


Fig.2 outline dimensions (unindicated tolerance: $\pm 0.10\text{mm}$)