

SavantIC Semiconductor

Product Specification

Silicon NPN Power Transistors

2N6055 2N6056

DESCRIPTION

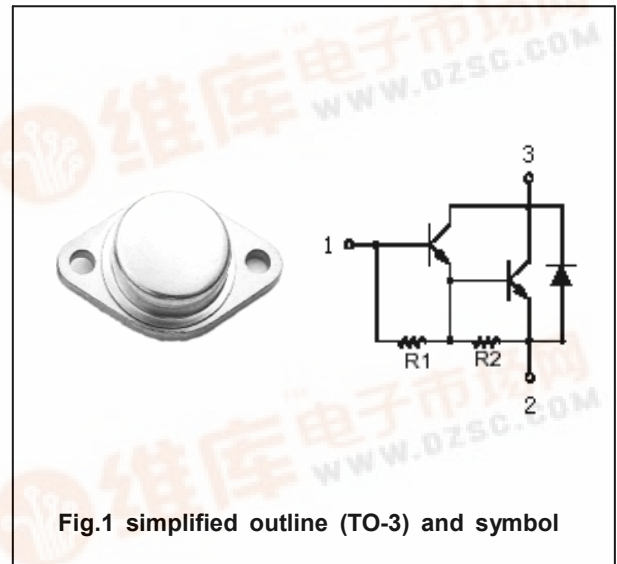
- With TO-3 package
- Low collector saturation voltage
- DARLINGTON
- Complement to type 2N6053;2N6054

APPLICATIONS

- General-purpose power amplifier and low frequency swithing applications

PINNING

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

Absolute maximum ratings($T_a = \square$)

SYMBOL	PARAMETER		CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	2N6055	Open emitter	60	V
		2N6056		80	
V_{CEO}	Collector-emitter voltage	2N6055	Open base	60	V
		2N6056		80	
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		$T_C = 25\square$	100	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	1.75	$\square/W$

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CHARACTERISTICS

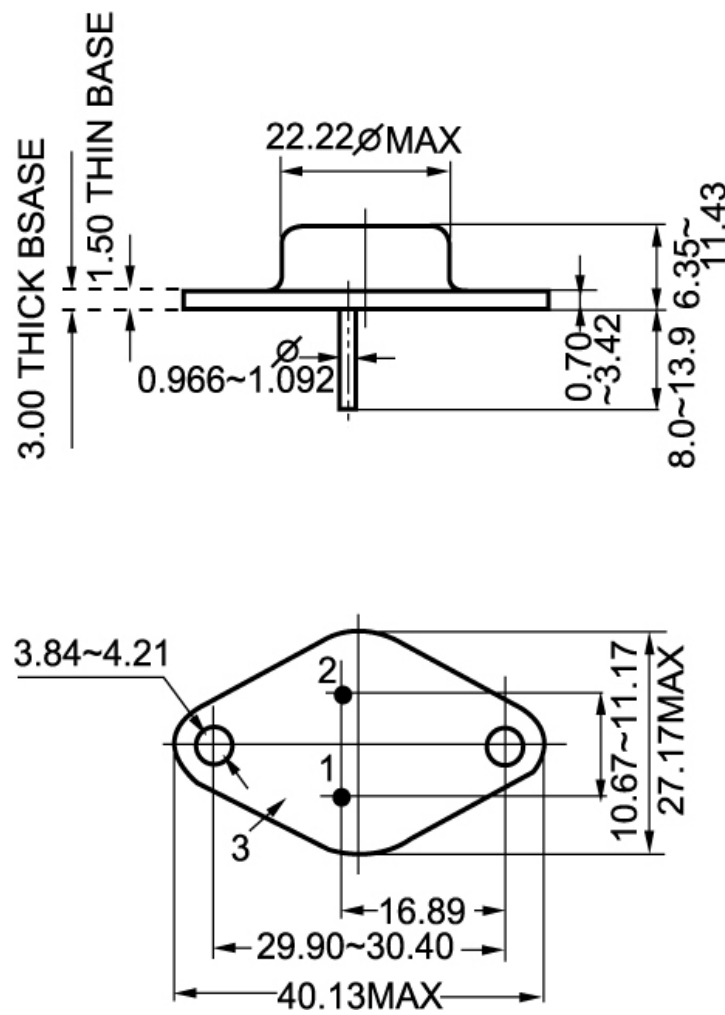
T_m=25℃ unless otherwise specified

SYMBOL	PARAMETER		CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CE0(SUS)}	Collector-emitter sustaining voltage	2N6055	I _C =0.1 A ; I _B =0	60			V
		2N6056		80			
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	V _{CE} =40V; I _B =0				
I _{CEX}	Collector cut-off current	2N6055	V _{CE} =60V; V _{BE(off)} =1.5V T _C =150℃			0.5 5.0	mA
		2N6056	V _{CE} =80V; V _{BE(off)} =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 =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

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PACKAGE OUTLINE

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