

Silicon NPN Power Transistors 2N6098 2N6099 2N6100 2N6101

DESCRIPTION

- With TO-220 package
- High current capability

APPLICATIONS

- For use in general-purpose amplifier and switching applications

PINNING

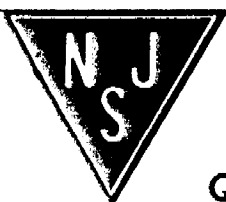
PIN	DESCRIPTION
1	Base
2	Collector; connected to mounting base
3	Emitter

Absolute maximum ratings (Ta=25)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT	
V _{CB0}	Collector-base voltage	Open emitter	2N6098	70	V
			2N6099	70	
			2N6100	80	
			2N6101	80	
V _{CE0}	Collector-emitter voltage	Open base	2N6098	70	V
			2N6099	70	
			2N6100	80	
			2N6101	80	
V _{EB0}	Emitter-base voltage	Open collector	8	V	
I _c	Collector current		10	A	
P _T	Total power dissipation	T _C =25	75	W	
T _j	Junction temperature		150		
T _{stg}	Storage temperature		-65~150		

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th-jc}	Thermal resistance from junction to case	1.67	°W



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CHARACTERISTICS

T_J=25 unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEQ(SUS)}	Collector-emitter sustaining voltage	2N6098	I _C =0.1A; I _B =0			V
		2N6099				
		2N6100				
		2N6101				
V _{CEsat-1}	Collector-emitter saturation voltage	I _C =5A; I _B =0.5A			1.3	V
V _{CEsat-2}	Collector-emitter saturation voltage	I _C =10A; I _B =2.5A			3.5	V
V _{BE}	Base-emitter on voltage	2N6098/6099	I _C =4A; V _{CE} =4V		1.3	V
		2N6100/6101				
I _{CBO}	Collector cut-off current	V _{CB} =Rated V _{CB0} ; I _E =0 T _C =150 °C			0.5 2.0	mA
I _{EBO}	Emitter cut-off current	V _{EB} =8V; I _C =0			1.0	mA
h _{FE}	DC current gain	2N6098/6099	I _C =4A; V _{CE} =4V	20	80	
		2N6100/6101				
f _T	Transition frequency	I _C =1A; V _{CE} =10V	0.8			MHz

