

TO-126 Plastic-Encapsulate Transistors

2SD669AL TRANSISTOR (NPN)

FEATURES

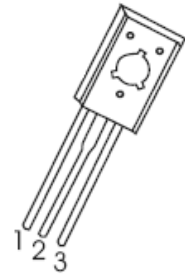
- Low Frequency Power Amplifier

MAXIMUM RATINGS (T_a=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V _{CBO}	Collector-Base Voltage	200	V
V _{CEO}	Collector-Emitter Voltage	170	V
V _{EBO}	Emitter-Base Voltage	6.5	V
I _C	Collector Current	1	A
P _C	Collector Power Dissipation	1	W
R _{θJA}	Thermal Resistance from Junction to Ambient	125	°C/W
T _j	Junction Temperature	150	°C
T _{stg}	Storage Temperature	-55~+150	°C

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1. EMITTER
2. COLLECTOR
3. BASE



ELECTRICAL CHARACTERISTICS (T_a=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V _{(BR)CBO}	I _C =100μA, I _E =0	200			V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C =1mA, I _B =0	170			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E = 100μA, I _C =0	6.5			V
Collector cut-off current	I _{CBO}	V _{CB} =195V, I _E =0			1	μA
Collector cut-off current	I _{CEO}	V _{CE} =165V, I _B =0			2	μA
Emitter cut-off current	I _{EBO}	V _{EB} =5V, I _C =0			0.1	μA
DC current gain	h _{FE(1)}	V _{CE} =5V, I _C =0.15A	100		320	
	h _{FE(2)}	V _{CE} =5V, I _C =500mA	33			
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =0.5A, I _B =0.05A			0.9	V
Base-emitter voltage	V _{BE}	V _{CE} =5V, I _C =0.15A			1.4	V
Collector output capacitance	C _{ob}	V _{CB} =10V, I _E =0, f=1MHz		14		pF
Transition frequency	f _T	V _{CE} =5V, I _C =150mA		140		MHz

CLASSIFICATION of h_{FE(1)}

RANK	C	D
RANGE	100-200	160-320

Typical Characteristics

2SD669AL

