

KSC2328A

Audio Power Amplifier Applications

- Complement to KSA928A
- Collector Power Dissipation : P_C=1W
- 3 Watt Output Application



1. Emitter 2. Collector 3. Base

NPN Epitaxial Silicon Transistor

Absolute Maximum Ratings T_a =25°C unless otherwise noted

Symbol	Parameter	Ratings	Units
V _{CBO}	Collector-Base Voltage	30	V
V _{CEO}	Collector-Emitter Voltage	30	V
V _{EBO}	Emitter-Base Voltage	5	V
I _C	Collector Current	2	A
P _C	Collector Power Dissipation	1	W
TJ	Junction Temperature	150	°C
T _{STG}	Storage Temperature	-55 ~ 150	°C

Electrical Characteristics T_a=25°C unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Тур.	Max.	Units
BV _{CBO}	Collector-Base Breakdown Voltage	I _C =100μA, I _E =0	30			V
BV _{CEO}	Collector-Emitter Breakdown Voltage	I _C =10mA, I _B =0	30			V
BV _{EBO}	Emitter-Base Breakdown Voltage	I _E =1mA, I _C =0	5			V
I _{CBO}	Collector Cut-off Current	V _{CB} =30V, I _E =0			100	nA
I _{EBO}	Emitter Cut-off Current	V_{EB} =5V, I_{C} =0			100	nA
h _{FE}	DC Current Gain	V_{CE} =2V, I_{C} =500mA	100		320	
V _{BE} (on)	Base-Emitter On Voltage	V_{CE} =2V, I_{C} =500mA			1.0	V
V _{CE} (sat)	Collector-Emitter Saturation Voltage	I _C =1.5A, I _B =0.03A			2.0	V
f _T	Current Gain Bandwidth Product	V _{CE} =2V, I _C =500mA		120		MHz
C _{ob}	Collector Output Capacitance	V _{CB} =10V,I _E =0, f=1MHz		30		pF

h_{FE} Classification

Classification	0	Y	
h _{FE}	100 ~ 200	160 ~ 320	

Typical Characteristics

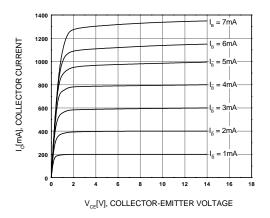


Figure 1. Static Characteristic

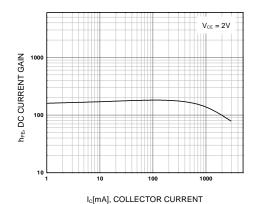


Figure 2. DC current Gain

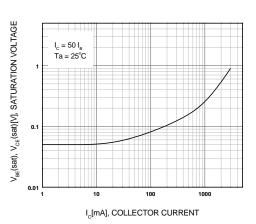


Figure 3. Collector-Emitter Saturation Voltage

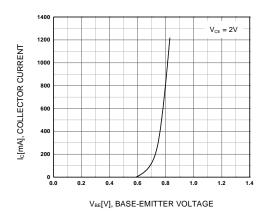


Figure 4. Base-Emitter On Voltage

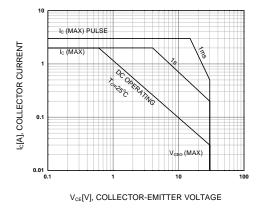


Figure 5. Safe Operating Area

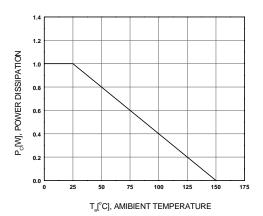


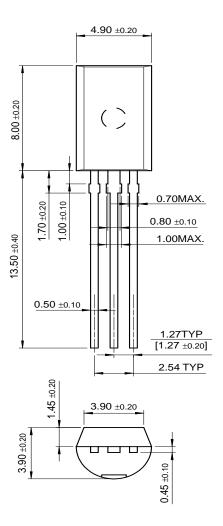
Figure 6. Power Derating

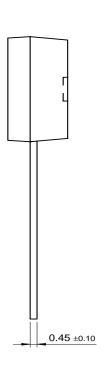
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Package Dimensions

TO-92L





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