

KSC2316

NPN EPITAXIAL SILICON TRANSISTOR

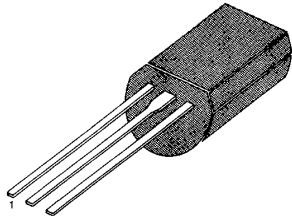
AUDIO POWER AMPLIFIER APPLICATIONS

- Driver Stage Amplifier
- Complement to KSA916

ABSOLUTE MAXIMUM RATINGS (T_A=25℃)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V _{CBO}	120	V
Collector-Emitter Voltage	V _{CEO}	120	V
Emitter-Base Voltage	V _{EBO}	5	V
Collector Current	I _C	800	mA
Collector Dissipation	P _C	900	mW
Junction Temperature	T _J	150	℃
Storage Temperature	T _{STG}	-55 ~ +150	℃

TO-92L



1. Emitter 2. Base 3. Collector

ELECTRICAL CHARACTERISTICS (T_A=25℃)

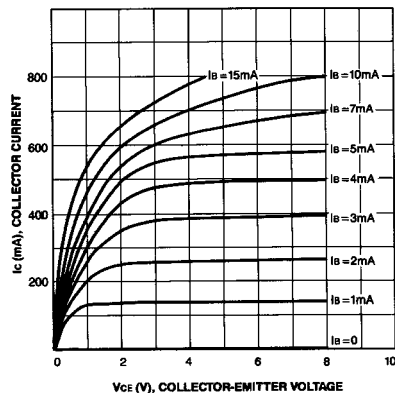
Characteristic	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector-Base Breakdown Voltage	BV _{CBO}	I _C =1mA, I _E =0	120			V
Collector-Emitter Breakdown Voltage	BV _{CEO}	I _C =10mA, I _B =0	120			V
Emitter-Base Breakdown Voltage	BV _{EBO}	I _E =1mA, I _C =0	5			V
Collector Cut-off Current	I _{CBO}	V _{CB} =120V, I _E =0			0.1	μA
DC Current Gain	h _{FE1}	V _{CE} =5V, I _C =10mA	60			
	h _{FE2}	V _{CE} =5V, I _C =100mA	80		240	
Collector-Emitter Saturation Voltage	V _{CE} (sat)	I _C =500mA, I _B =50mA			1	V
Current-Gain-Bandwidth Product	f _T	V _{CE} =5V, I _C =100mA		120		MHz
Collector Output Capacitance	C _{OB}	V _{CB} =10V, I _E =0 f=1MHz			30	pF

h_{FE} CLASSIFICATION

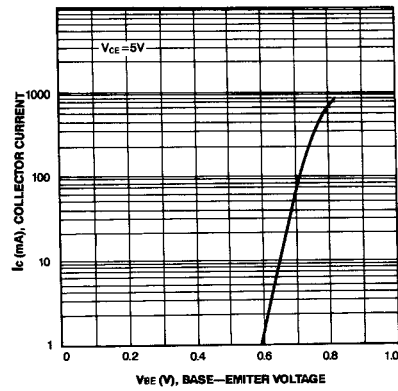
Classification	O	Y
h _{FE} (2)	80-160	120-240



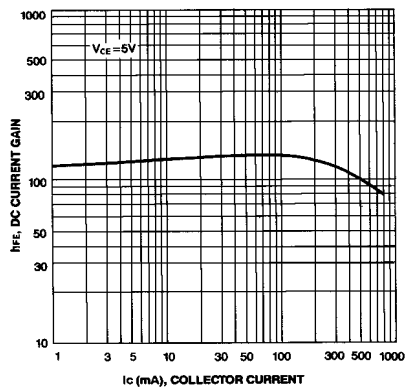
STATIC CHARACTERISTIC



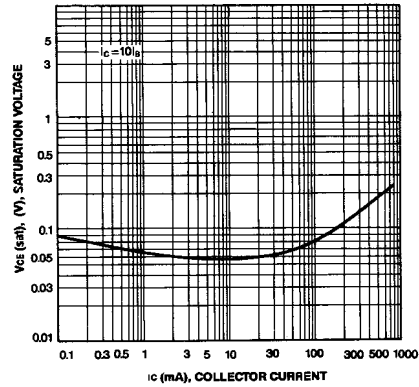
BASE-EMITTER ON VOLTAGE



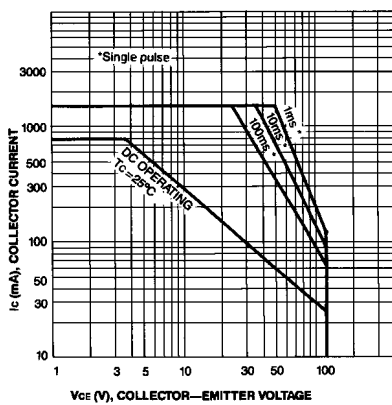
DC CURRENT GAIN



COLLECTOR-EMITTER SATURATION VOLTAGE



SAFE OPERATING AREA



POWER DERATING

