

KSC2310

NPN EPITAXIAL SILICON TRANSISTOR

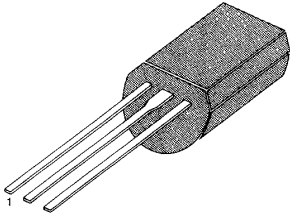
HIGH VOLTAGE POWER AMPLIFIER

- Collector - Base Voltage V_{CBO} =200V
- Current Gain-Bandwidth Product f_T =100MHz

ABSOLUTE MAXIMUM RATINGS (T_A =25 °C)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V_{CBO}	200	V
Collector-Emitter Voltage	V_{CEO}	150	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	50	mA
Collector Dissipation	P_C	800	mW
Junction Temperature	T_J	150	°C
Storage Temperature	T_{STG}	-55 ~ +150	°C

TO-92L



1. Emitter 2. Collector 3. Base

ELECTRICAL CHARACTERISTICS (T_A =25 °C)

Characteristic	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector-Base Breakdown Voltage	BV_{CBO}	$I_C=100\mu A, I_E=0$	200			V
Collector-Emitter Breakdown Voltage	BV_{CEO}	$I_C=5mA, I_B=0$	150			V
Emitter-Base Breakdown Voltage	BV_{EBO}	$I_E=100\mu A, I_C=0$	5			V
Collector Cut-off Current	I_{CBO}	$V_{CB}=200V, I_E=0$			0.1	μA
DC Current Gain	h_{FE}	$V_{CE}=5V, I_C=10mA$	40		240	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=10mA, I_B=1mA$			0.5	V
Current Gain-Bandwidth Product	f_T	$V_{CE}=30V, I_C=10mA$		100		MHz
Output Capacitance	C_{OB}	$V_{CB}=10V, I_E=0, f=1MHz$		3.5	5	pF

h_{FE} CLASSIFICATION

Classification	R	O	Y
h_{FE}	40-80	70-140	120-240



