

POWER AMPLIFIER

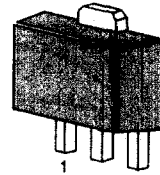
- Collector-Emitter Voltage $V_{CE0}=120V$
- $f_T=120MHz$
- Collector Dissipation $P_C=1\sim 2W$: Mounted on Ceramic Board
- Complement to KSA1201

ABSOLUTE MAXIMUM RATINGS ($T_A=25^\circ C$)

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
Base Current	I_B	160	mA
Collector Dissipation	P_C	500	mW
	P_C^*	1,000	mW
Junction Temperature	T_J	150	$^\circ C$
Storage Temperature	T_{STG}	-55 ~ 150	$^\circ C$

*Mounted on Ceramic Board (250mmx0.8mm)

SOT-89



1. Base 2. Collector 3. Emitter

3

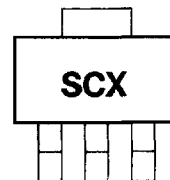
ELECTRICAL CHARACTERISTICS ($T_A=25^\circ C$)

Characteristic	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector-Emitter Breakdown Voltage	BV_{CEO}	$I_C=10\mu A, I_B=0$	120			V
Emitter Base Breakdown Voltage	BV_{EBO}	$I_E=1mA, I_C=0$	5			V
Collector Cut-off Current	I_{CBO}	$V_{CB}=120V, I_E=0$			100	nA
Emitter Cut-off Current	I_{EBO}	$V_{BE}=5V, I_C=0$			100	nA
DC Current Gain	h_{FE}	$V_{CE}=5V, I_C=100mA$	80		240	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=500mA, I_B=50mA$			1.0	V
Base Emitter On Voltage	$V_{BE(on)}$	$V_{CE}=5V, I_C=500mA$			1.0	V
Current Gain-Bandwidth Product	f_T	$V_{CE}=5V, I_C=100mA$		120		MHz
Output Capacitance	C_{OB}	$V_{CB}=10V, I_E=0, f=1MHz$			30	pF

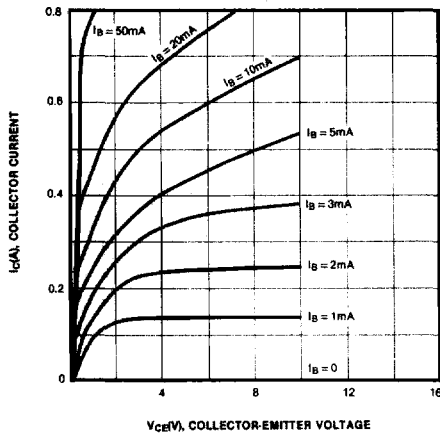
h_{FE} CLASSIFICATION

Classification	O	Y
h_{FE}	80~160	120~240

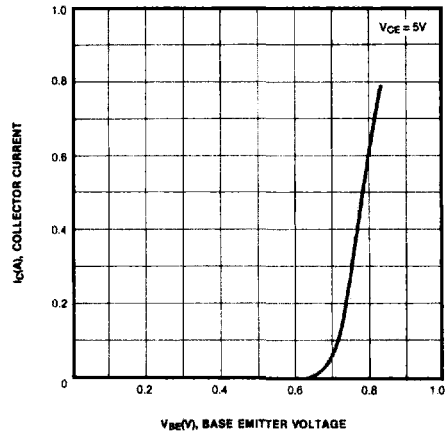
Marking



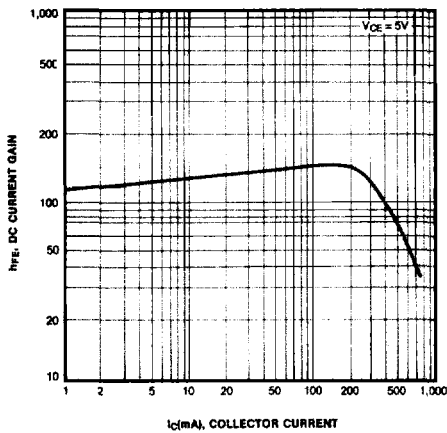
STATIC CHARACTERISTIC



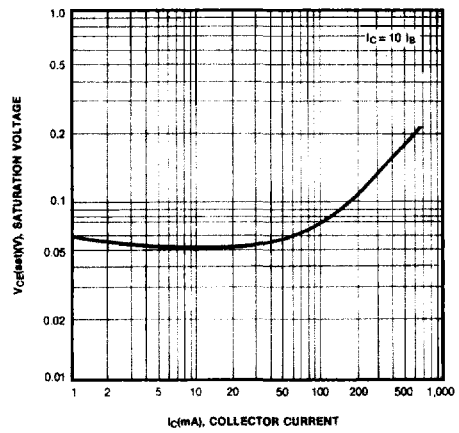
BASE EMITTER ON VOLTAGE



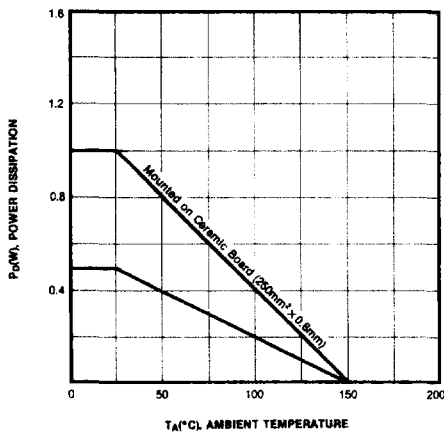
DC CURRENT GAIN



COLLECTOR-EMITTER SATURATION VOLTAGE



POWER DERATING



SAFE OPERATING AREA

