

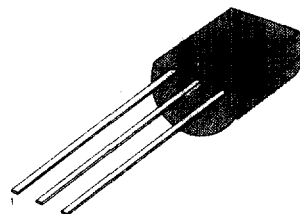
**LOW FREQUENCY AMPLIFIER  
MEDIUM SPEED SWITCHING**

- Complement to KSA708
- High Collector-Base Voltage  $V_{CB0}=80V$
- Collector Current  $I_C=700mA$
- Collector Dissipation  $P_C=800mW$

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

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	$V_{CB0}$	80	V
Collector-Emitter Voltage	$V_{CEO}$	60	V
Emitter-Base Voltage	$V_{EBO}$	8	V
Collector Current	$I_C$	700	mA
Collector Dissipation	$P_C$	800	mW
Junction Temperature	$T_J$	150	$^\circ C$
Storage Temperature	$T_{STG}$	-55 ~ 150	$^\circ C$

TO-92



1. Emitter 2. Base 3. Collector

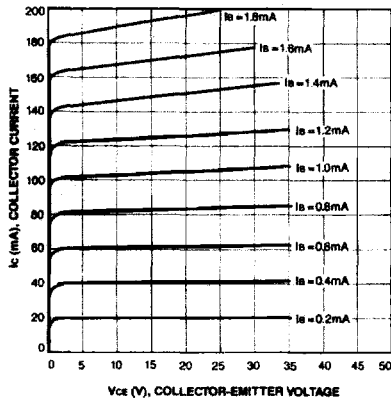
**ELECTRICAL CHARACTERISTICS ( $T_A=25^\circ C$ )**

Characteristic	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector-Base Breakdown Voltage	$BV_{CB0}$	$I_C=100\mu A, I_E=0$	80			V
Collector-Emitter Breakdown Voltage	$BV_{CEO}$	$I_C=10mA, I_B=0$	60			V
Emitter-Base Breakdown Voltage	$BV_{EBO}$	$I_E=10\mu A, I_C=0$	8			V
Collector Cut-off Current	$I_{CB0}$	$V_{CB}=60V, I_E=0$			0.1	$\mu A$
Emitter Cut-off Current	$I_{EB0}$	$V_{EB}=5V, I_C=0$			0.1	$\mu A$
DC Current Gain	$h_{FE}$	$V_{CE}=2V, I_C=50mA$	40		400	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=500mA, I_B=50mA$		0.2	0.4	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=500mA, I_B=50mA$		0.86	1.1	V
Current Gain-Bandwidth Product	$f_T$	$V_{CE}=10V, I_C=50mA$	30	50		MHz
Output Capacitance	$C_{OB}$	$V_{CB}=10V, I_E=0$ $f=1MHz$		8		pF

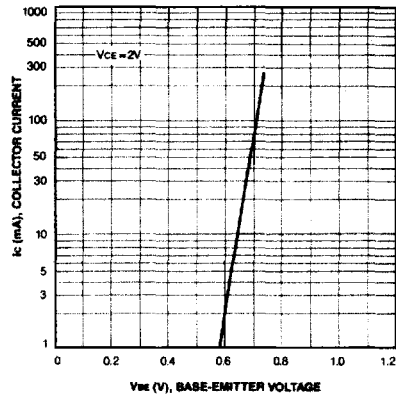
 **$h_{FE}$  CLASSIFICATION**

Classification	R	O	Y	G
$h_{FE}$	40-80	70-140	120-240	200-400

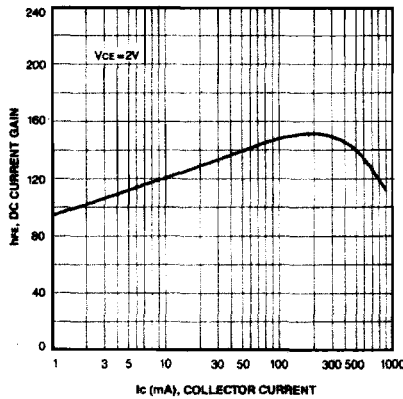
STATIC CHARACTERISTIC



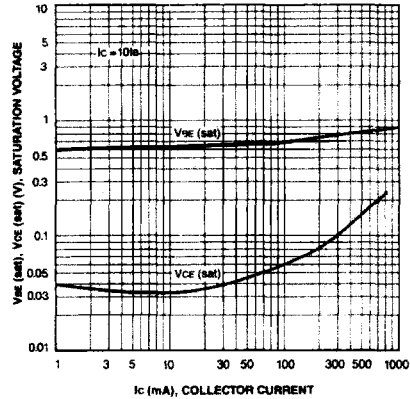
BASE-EMITTER ON VOLTAGE



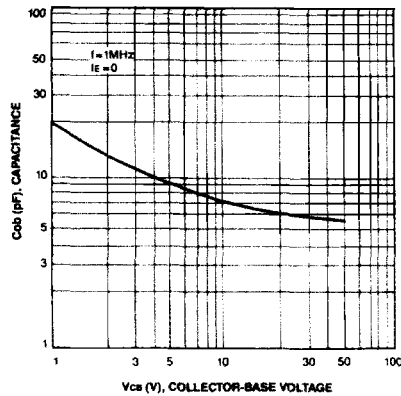
DC CURRENT GAIN



BASE-EMITTER SATURATION VOLTAGE  
COLLECTOR-EMITTER SATURATION VOLTAGE



COLLECTOR OUTPUT CAPACITANCE



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