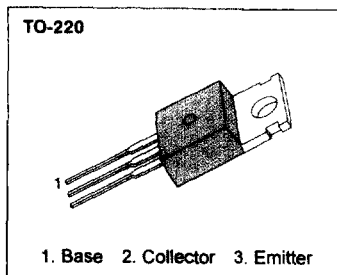


LOW FREQUENCY POWER AMPLIFIER POWER REGULATOR

- Complement to KSA473
- Collector Current: $I_C=3A$
- Collector Dissipation: $P_C=10W$ ($T_C=25^\circ C$)

ABSOLUTE MAXIMUM RATINGS

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	BV_{CBO}	30	V
Collector-Emitter Voltage	BV_{CEO}	30	V
Emitter-Base Voltage	BV_{EBO}	5	V
Collector Current	I_C	3	A
Collector Dissipation ($T_C=25^\circ C$)	P_C	10	W
Junction Temperature	T_J	150	$^\circ C$
Storage Temperature	T_{STG}	-55 ~ 150	$^\circ C$



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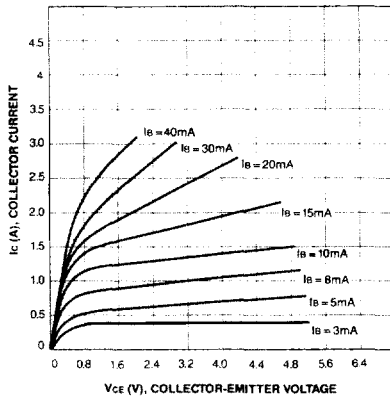
ELECTRICAL CHARACTERISTICS ($T_C=25^\circ C$)

Characteristic	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector-Base Breakdown Voltage	BV_{CBO}	$I_C = 500\mu A, I_E = 0$	30			V
Collector-Emitter Breakdown Voltage	BV_{CEO}	$I_C = 10mA, I_B = 0$	30			V
Emitter-Base Breakdown Voltage	BV_{EBO}	$I_E = -1mA, I_C = 0$	5			V
Collector Cut-off Current	I_{CBO}	$V_{CB} = 20V, I_E = 0$			1.0	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB} = 5V, I_C = 0$			1.0	μA
DC Current Gain	h_{FE1}	$V_{CE} = 2V, I_C = 0.5A$	70		240	
	h_{FE2}	$V_{CE} = 2V, I_C = 2.5A$	25			
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 2A, I_B = 0.2A$		0.3	0.8	V
Base-Emitter On Voltage	$V_{BE(on)}$	$V_{CE} = 2V, I_C = 0.5A$		0.75	1.0	V
Current Gain Base Width Product	f_T	$V_{CE} = 2V, I_C = 0.5A$		100		MHz
Output Capacitance	C_{OB}	$V_{CB} = 10V, I_E = 0,$ $f = 1MHz$		35		PF

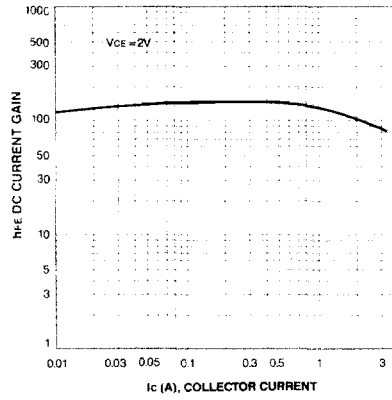
h_{FE} CLASSIFICATION

Classification	O	Y
$h_{FE(1)}$	70 - 140	120 - 240

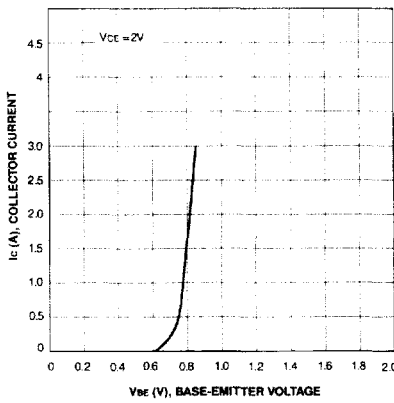
STATIC CHARACTERISTIC



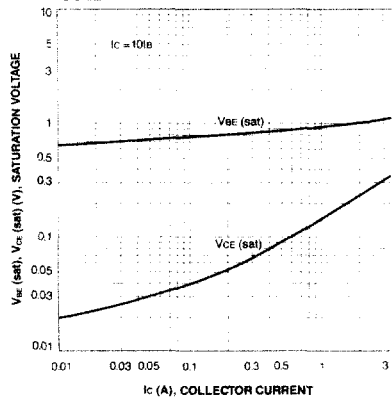
DC CURRENT GAIN



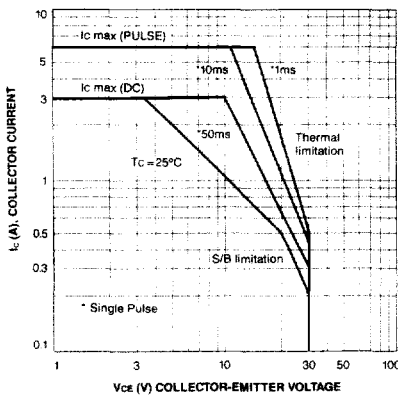
BASE-EMITTER ON VOLTAGE



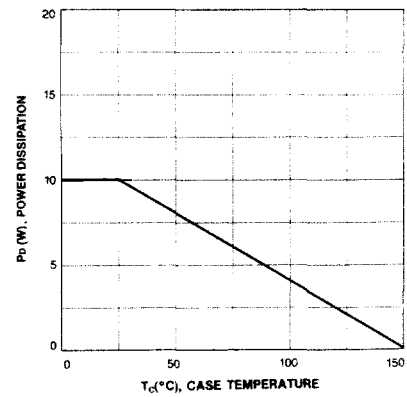
BASE-EMITTER SATURATION VOLTAGE
COLLECTOR-EMITTER SATURATION VOLTAGE

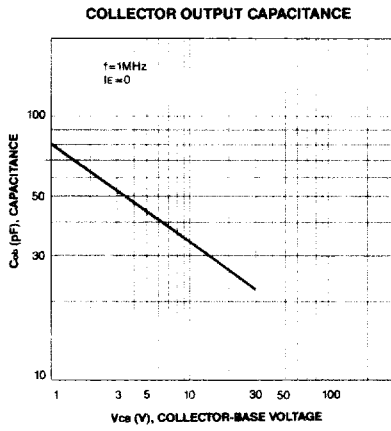


SAFE OPERATING AREA



POWER DERATING





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