

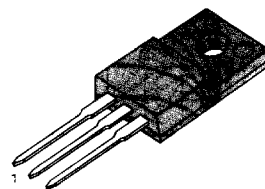
POWER AMPLIFIER APPLICATIONS

- Complement to KSB1017

ABSOLUTE MAXIMUM RATINGS

Characteristic	Symbol	Rating	Unit
Collector Base Voltage	V_{CBO}	80	V
Collector Emitter Voltage	V_{CEO}	80	V
Emitter Base Voltage	V_{EBO}	5	V
Collector Current	I_C	4	A
Base Current	I_B	0.4	A
Collector Dissipation ($T_C=25^\circ\text{C}$)	P_C	25	W
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature	T_{STG}	-55 ~ 150	$^\circ\text{C}$

TO-220F



1. Base 2. Collector 3. Emitter

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

Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
Collector Emitter Breakdown Voltage	BV_{CBO}	$I_C = 50\text{mA}$, $I_B = 0$	80			V
Collector Cutoff Current	I_{CBO}	$V_{CB} = 80\text{V}$, $I_E = 0$			30	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = 5\text{V}$, $I_C = 0$			100	μA
DC Current Gain	h_{FE1}	$V_{CE} = 5\text{V}$, $I_C = 0.5\text{A}$	40		240	
	h_{FE2}	$V_{CE} = 5\text{V}$, $I_C = 3\text{A}$	15	50		
Collector Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 3\text{A}$, $I_B = 0.3\text{A}$		0.45	1.5	V
Base Emitter On Voltage	$V_{BE(on)}$	$V_{CE} = 5\text{V}$, $I_C = 3\text{A}$		1	1.5	V
Current Gain Bandwidth Product	f_T	$V_{CE} = 5\text{V}$, $I_C = 0.5\text{A}$		8		MHz
Output Capacitance	C_{OB}	$V_{CB} = 10\text{V}$, $f = 1\text{MHz}$		90		pF

 $h_{FE}(1)$ CLASSIFICATION

Classification	R	O	Y
h_{FE1}	40 ~ 80	70 ~ 140	120 ~ 240

