

**LOW FREQUENCY POWER AMPLIFIER
LOW SPEED SWITCHING**

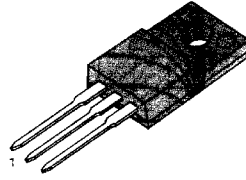
• Complement to KSB1097

ABSOLUTE MAXIMUM RATINGS

Characteristic	Symbol	Rating	Unit
Collector Base Voltage	V_{CBO}	100	V
Collector Emitter Voltage	V_{CEO}	60	V
Emitter Base Voltage	V_{EBO}	7	V
Collector Current (DC)	I_C	7	A
*Collector Current (Pulse)	I_C	15	A
Base Current	I_B	3.5	A
Collector Dissipation ($T_A=25^\circ\text{C}$)	P_C	2	W
Collector Dissipation ($T_C=25^\circ\text{C}$)	P_C	30	W
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature	T_{STG}	-55 ~ 150	$^\circ\text{C}$

* $PW \leq 300\mu\text{s}$, Duty Cycle $\leq 10\%$

TO-220F



1.Base 2.Collector 3.Emitter

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

Characteristic	Symbol	Test Condition	Min	Max	Unit
Collector Cutoff Current	I_{CBO}	$V_{CB} = 80\text{V}, I_E = 0$		10	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = 5\text{V}, I_C = 0$		10	μA
*DC Current Gain	h_{FE1}	$V_{CE} = 1\text{V}, I_C = 3\text{A}$	40	200	
	h_{FE2}	$V_{CE} = 1\text{V}, I_C = 5\text{A}$	20		
*Collector Emitter Saturation Voltage	$V_{CE(sat)1}$	$I_C = 5\text{A}, I_B = 0.5\text{A}$		0.5	V
*Base Emitter Saturation Voltage	$V_{BE(sat)2}$	$I_C = 5\text{A}, I_B = 0.5\text{A}$		1.5	V

* Pulse Test: $PW \leq 350\mu\text{s}$, Duty Cycle $\leq 2\%$

$h_{FE}(1)$ CLASSIFICATION

Classification	R	O	Y
h_{FE1}	40 ~ 80	80 ~ 120	100 ~ 200

