

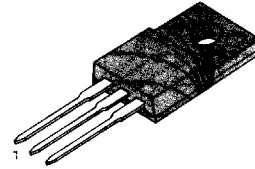
POWER AMPLIFIER APPLICATIONS

- High DC Current Gain
- Low Collector Emitter Saturation Voltage
- Complement to KSB1023

ABSOLUTE MAXIMUM RATINGS

Characteristic	Symbol	Rating	Unit
Collector Base Voltage	V_{CBO}	60	V
Collector Emitter Voltage	V_{CEO}	40	V
Emitter Base Voltage	V_{EBO}	5	V
Collector Current (DC)	I_C	3	A
Collector Current (Pulse)	I_C	6	A
Base Current	I_B	0.3	A
Collector Dissipation ($T_A=25^\circ\text{C}$)	P_C	2	W
Collector Dissipation ($T_C=25^\circ\text{C}$)	P_C	20	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}	$I_C = 25\text{mA}$, $I_B = 0$	40			V
Collector Cutoff Current	I_{CBO}	$V_{CB} = 60\text{V}$, $I_E = 0$			20	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = 5\text{V}$, $I_C = 0$			2.5	mA
DC Current Gain	h_{FE1}	$V_{CE} = 2\text{V}$, $I_C = 1\text{A}$	2000			
	h_{FE2}	$V_{CE} = 2\text{V}$, $I_C = 3\text{A}$	1000			
Collector Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 2\text{A}$, $I_B = 4\text{mA}$			1.5	V
Base Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = 2\text{A}$, $I_B = 4\text{mA}$			2	V
Turn On Time	t_{ON}	$I_B1 = -I_B2 = 6\text{mA}$		0.1		μs
Storage Time	t_{STG}	$V_{CC} = 30\text{V}$		1		μs
Fall Time	t_F			0.2		μs

