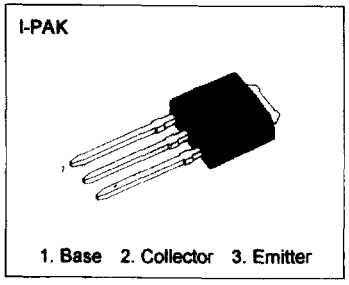
POWER AMPLIFIER APPLICATIONS

- Low Collector Emitter Saturation Voltage
- Complement to KSA 1241



ABSOLUTE MAXIMUM RATINGS

Characteristic	Symbol	Rating	Unit
Collector Base Voltage	V_{CBO}	50	V
Collector Emitter Voltage	V_{CEO}	50	V
Emitter Base Voltage	V_{EBO}	5	V
Base Current	I_B	1	A
Collector Current	I_C	2	A
Collector Dissipation (T_A=25℃)	P_C	1	W
Collector Dissipation (T_C=25℃)	P_C	10	W
Junction Temperature	T_J	150	℃
Storage Temperature	T_{STG}	-55 ~ 150	℃

ELECTRICAL CHARACTERISTICS (T_C =25℃)

Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
Collector Emitter Breakdown Voltage	BV_{CEO}	I_C = 10mA, I_B = 0	50			V
Collector Cutoff Current	I_{CBO}	V_{CB} = 50V, I_E = 0			1	uA
Emitter Cutoff Current	I_{EBO}	V_{EB} = 5V, I_C = 0			1	uA
DC Current Gain	$h_{FE}1$	V_{CE} = 2V, I_C= 0.5A	70		240	
	$h_{FE}2$	V_{CE} = 2V, I_C = 1.5A	40			
Collector Emitter Saturation Voltage	V_{CE}(sat)	I_C = 1A, I_B = 0.05A			0.5	V
Base Emitter Saturation Voltage	V_{BE}(sat)	I_C = 1A, I_B = 0.05A			1.2	V
Current Gain Bandwidth Product	f_T	V_{CE} = 2V, I_C = 0.5A		100		MHz
Output Capacitance	C_{OB}	V_{CB} = 10V, f = 1MHz		30		pF
Turn On Time	t_{ON}	V_{CC} = 30V		0.1		uS
Storage Time	t_{STG}	1_B1 = -I_B2 = 0.05A		1		uS
Fall Time	t_F			0.1		uS

h_{FE}(1) CLASSIFICATION

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