

LOW FREQUENCY POWER AMP, CONVERTER
ELECTRONIC GOVERNOR APPLICATIONS

FEATURES

- Low Saturation Voltage
: $V_{CE(sat)} = -0.3V(\text{Max.})$ at $I_C = -0.5A$.
- Complementary to KTD545.

MAXIMUM RATING ($T_a = 25^\circ\text{C}$)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	-30	V
Collector-Emitter Voltage	V_{CEO}	-25	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current	I_C	-1	A
Collector Power Dissipation	P_C	625	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55 ~ 150	$^\circ\text{C}$



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

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB} = -20V, I_E = 0$	-	-	-0.1	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB} = -5V, I_C = 0$	-	-	-0.1	μA
DC Current Gain	$h_{FE(1)}$ (Note)	$V_{CE} = -2V, I_C = -50\text{mA}$	70	-	400	
	$h_{FE(2)}$	$V_{CE} = -2V, I_C = -1A(\text{Pulse})$	30	-	-	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -500\text{mA}, I_B = -50\text{mA}$	-	-0.15	-0.3	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = -500\text{mA}, I_B = -50\text{mA}$	-	-0.85	-1.2	V
Transition Frequency	f_T	$V_{CE} = -10V, I_C = -50\text{mA}$	-	180	-	MHz
Collector Output Capacitance	C_{ob}	$V_{CB} = -10V, I_E = 0, f = 1\text{MHz}$	-	25	-	pF

Note : h_{FE} Classification O:70 ~ 140, Y:120 ~ 240, GR:200 ~ 400

