

Transistors

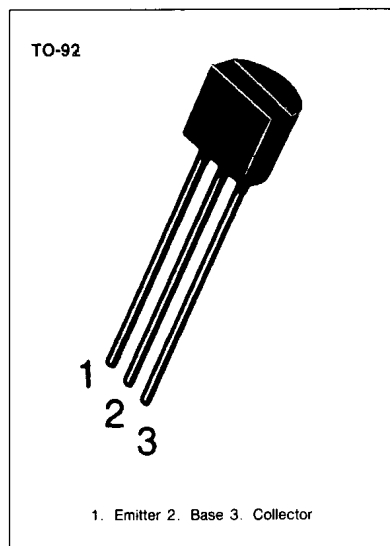
C8550

2W OUTPUT AMPLIFIER OF PORTABLE RADIO IN CLASS B PUSH-PULL OPERATION.

- Collector Current $I_C = -1.5A$
- Collector Dissipation $P_C = 2W$ ($T_C = 25^\circ C$)

ABSOLUTE MAXIMUM RATINGS ($T_a = 25^\circ C$)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V_{CBO}	-40	V
Collector-Emitter Voltage	V_{CEO}	-25	V
Emitter-Base Voltage	V_{EBO}	-6	V
Collector Current	I_C	-1.5	A
Collector Dissipation	P_C	1	W
Junction Temperature	T_j	150	$^\circ C$
Storage Temperature	T_{stg}	-65~150	$^\circ C$



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

Characteristic	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector-Base Breakdown Voltage	BV_{CBO}	$I_C = -100\mu A, I_E = 0$	-40			V
Collector-Emitter Breakdown Voltage	BV_{CEO}	$I_C = -2mA, I_B = 0$	-25			V
Emitter-Base Breakdown Voltage	BV_{EBO}	$I_E = -100\mu A, I_C = 0$	-6			V
Collector Cutoff Current	I_{CBO}	$V_{CB} = -35V, I_F = 0$			-100	nA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = -6V, I_C = 0$			-100	nA
DC Current Gain	h_{FE1}	$V_{CE} = -1V, I_C = -5mA$	45	170		
	h_{FE2}	$V_{CE} = -1V, I_C = -100mA$	85	160	300	
	h_{FF3}	$V_{CE} = -1V, I_C = -800mA$	40	80		
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -800mA, I_B = -80mA$		-0.28	-0.5	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = -800mA, I_B = -80mA$		-0.98	-1.2	V
Base Emitter Voltage	V_{BE}	$V_{CE} = -1V, I_C = -10mA$		-0.66	-1.0	V
Output Capacitance	C_{ob}	$V_{CB} = -10V, I_E = 0$		15		pF
Current Gain-Bandwidth Product	f_T	$I = 1MHz, V_{CE} = -10V, I_C = -50mA$	100	200		MHz

h_{FE} (2) CLASSIFICATION

Classification	B	C	D
h_{FE} (2)	85-160	120-200	160-300

