

# Transistors

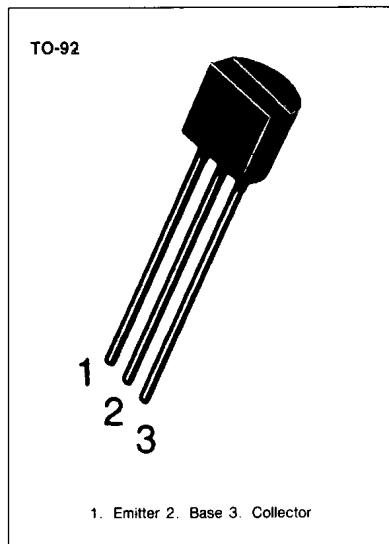
## C8550

### 2W OUTPUT AMPLIFIER OF PORTABLE RADIOS 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	
	$h_{FE3}$	$V_{CE} = -1V, I_C = -800mA$	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
		$f = 1MHz$				
Current Gain-Bandwidth Product	$f_T$	$V_{CE} = -10V, I_C = -50mA$	100	200		MHz

### $h_{FE}$ (2) CLASSIFICATION

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

