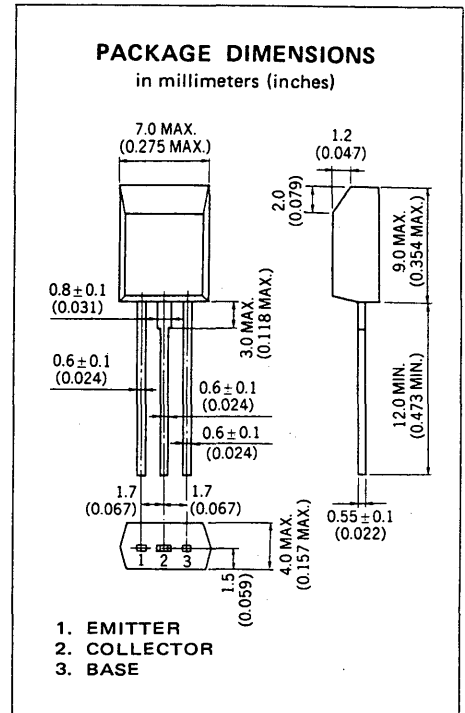


DESCRIPTION The 2SD774 is designed for use in driver and output stages of audio frequency amplifiers.

- FEATURES**
- High Total Power Dissipation $P_T : 1.0 \text{ W}$ ($T_a = 25^\circ \text{C}$)
 - High Voltage $V_{CE} : 50 \text{ V MIN.}$
 - Complementary to the NEC 2SB734 PNP Transistor.

ABSOLUTE MAXIMUM RATINGS

Maximum Temperatures	
Storage Temperature -55 to $+150^\circ \text{C}$
Junction Temperature 150°C Maximum
Maximum Power Dissipation ($T_a = 25^\circ \text{C}$)	
Total Power Dissipation 1.0 W
Maximum Voltages and Current ($T_a = 25^\circ \text{C}$)	
V_{CBO} Collector to Base Voltage 100 V
V_{CEO} Collector to Emitter Voltage 50 V
V_{EBO} Emitter to Base Voltage 6.0 V
I_C Collector Current 1.0 A



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

SYMBOL	CHARACTERISTIC	MIN.	TYP.	MAX.	UNIT	TEST CONDITIONS
h_{FE1}	DC Current Gain	135	300	600	—	$V_{CE} = 2.0 \text{ V}, I_C = 100 \text{ mA}$
h_{FE2}	DC Current Gain	70			—	$V_{CE} = 1.0 \text{ V}, I_C = 1.0 \text{ A}$
f_T	Gain Bandwidth Product	50	95		MHz	$V_{CE} = 2.0 \text{ V}, I_E = -10 \text{ mA}$
C_{ob}	Output Capacitance		16	35	pF	$V_{CB} = 10 \text{ V}, I_E = 0, f = 1.0 \text{ MHz}$
I_{CBO}	Collector Cutoff Current			100	nA	$V_{CB} = 50 \text{ V}, I_E = 0$
I_{EBO}	Emitter Cutoff Current			100	nA	$V_{EB} = 6.0 \text{ V}, I_C = 0$
V_{BE}	Base to Emitter Voltage	0.55	0.60	0.65	V	$V_{CE} = 6.0 \text{ V}, I_C = 5.0 \text{ mA}$
$V_{CE(sat)}$	Collector Saturation Voltage		0.23	0.30	V	$I_C = 1.0 \text{ A}, I_B = 50 \text{ mA}$
$V_{BE(sat)}$	Base Saturation Voltage		0.92	1.20	V	$I_C = 1.0 \text{ A}, I_B = 50 \text{ mA}$

Classification of h_{FE1}

Rank	L ₂	K ₃	K ₄	U ₄	U ₅
Range	135 - 270	200 - 320	250 - 400	300 - 480	360 - 600

Test Conditions : $V_{CE} = 2.0 \text{ V}, I_C = 100 \text{ mA}$.

TYPICAL CHARACTERISTICS (Ta=25 °C)

