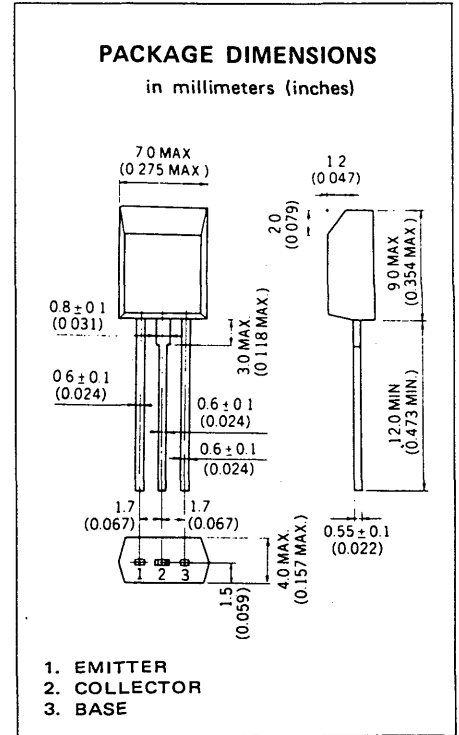


DESCRIPTION The 2SD571 is designed for use in driver and output stages of audio frequency amplifiers.

- FEATURES**
- High total power dissipation and high breakdown voltage:
1.0 W at 25 °C Ambient temperature/ $V_{CE0} = 50$ V
 - Complementary to the NEC 2SB605 PNP transistor.

ABSOLUTE MAXIMUM RATINGS

Maximum Temperatures	
Storage Temperature -55 to +150 °C
Junction Temperature +150 °C Maximum
Maximum Power Dissipation ($T_a = 25$ °C)	
Total Power Dissipation 1.0 W
Thermal Resistance (Junction to Ambient)	..125 °C/W
Maximum Voltages and Currents ($T_a = 25$ °C)	
V_{CBO} Collector to Base Voltage 60 V
V_{CEO} Collector to Emitter Voltage 50 V
V_{EBO} Emitter to Base Voltage 5.0 V
I_C Collector Current 0.7 A
I_B Base Current 0.1 A



ELECTRICAL CHARACTERISTICS ($T_a = 25$ °C)

SYMBOL	CHARACTERISTIC	MIN.	TYP.	MAX.	UNIT	TEST CONDITIONS
h_{FE1}	DC Current Gain	90	200	400	—	$V_{CE} = 1.0$ V, $I_C = 0.1$ A
h_{FE2}	DC Current Gain	50	150		—	$V_{CE} = 1.0$ V, $I_C = 0.5$ A
f_T	Gain Bandwidth Product		110		MHz	$V_{CE} = 6.0$ V, $I_E = 10$ mA
C_{ob}	Output Capacitance		13		pF	$V_{CB} = 6.0$ V, $I_E = 0$, $f = 1.0$ MHz
I_{CBO}	Collector Cutoff Current			100	nA	$V_{CB} = 60$ V, $I_E = 0$
I_{EBO}	Emitter Cutoff Current			100	nA	$V_{EB} = 5.0$ V, $I_C = 0$
V_{BE}	Base to Emitter Voltage	600	635	700	mV	$V_{CE} = 6.0$ V, $I_C = 10$ mA
$V_{CE(sat)}$	Collector Saturation Voltage		0.12	0.35	V	$I_C = 0.5$ A, $I_B = 0.05$ A
$V_{BE(sat)}$	Base Saturation Voltage		0.90	1.2	V	$I_C = 0.5$ A, $I_B = 0.05$ A

Classification of h_{FE1}

Rank	M	L	K
Range	90 - 180	135 - 270	200 - 400

h_{FE1} Test Conditions: $V_{CE} = 1.0$ V, $I_C = 0.1$ A

TYPICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$ unless otherwise noted)

