

NPN SILICON POWER TRANSISTOR

2SD1585

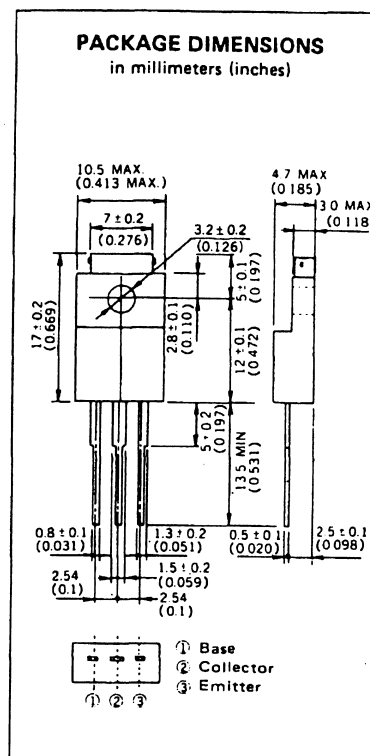
DESCRIPTION The 2SD1585 is an NPN general purpose transistor designed for use in audio frequency power amplifier.

- FEATURES**
- Easy mount by eliminating Sheet and Bushing.
 - Complementary to the 2SB1094.

ABSOLUTE MAXIMUM RATINGS

Maximum Temperatures		
Storage Temperature -55 to +150 °C	
Junction Temperature 150 °C Maximum	
Maximum Power Dissipations		
Total Power Dissipation (T _a = 25 °C) 2.0 W	
Total Power Dissipation (T _c = 25 °C) 15 W	
Maximum Voltages and Currents (T_a = 25 °C)		
V _{CBO}	Collector to Base Voltage 60 V
V _{CEO}	Collector to Emitter Voltage 60 V
V _{EBO}	Emitter to Base Voltage 7.0 V
I _{C(DC)}	Collector Current (DC) 3.0 A
I _{C(pulse)}	Collector Current (Pulse)* 5.0 A
I _{B(pulse)}	Base Current (DC) 0.6 A

* PW ≤ 10 ms, Duty Cycle ≤ 50 %



ELECTRICAL CHARACTERISTICS (T_a = 25 °C)

SYMBOL	CHARACTERISTIC	MIN.	TYP.	MAX.	UNIT	TEST CONDITIONS
h _{FE1} **	DC Current Gain	20				V _{CE} = 5.0 V, I _C = 50 mA
h _{FE2} **	DC Current Gain	40		200		V _{CE} = 5.0 V, I _C = 0.5 A
f _T	Gain Bandwidth Product		16		MHz	V _{CE} = 5.0 V, I _C = 0.1 A
C _{ob}	Output Capacitance		48		pF	V _{CB} = 10 V, I _E = 0, f = 1.0 MHz
I _{CBO}	Collector Cutoff Current			10	μA	V _{CB} = 60 V, I _E = 0
I _{EBO}	Emitter Cutoff Current			10	μA	V _{EB} = 7.0 V, I _C = 0
V _{CE(sat)} **	Collector Saturation Voltage			1.5	V	I _C = 2.0 A, I _B = 0.2 A
V _{BE(sat)} **	Base Saturation Voltage			2.0	V	I _C = 2.0 A, I _B = 0.2 A

** Pulsed: PW ≤ 350 μs, Duty Cycle ≤ 2 %

Classification of h_{FE2}

Rank	M	L	K
Range	40 to 80	60 to 120	100 to 200

Test Conditions: V_{CE} = 5.0 V, I_C = 0.5 A

