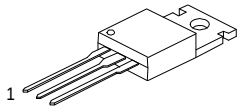
NPN EPITAXIAL TRANSISTOR

DESCRIPTION

The UTC 2SD880 is designed for audio frequency power amplifier applications.

FEATURE

*High DC Current Gain:
hFE=300(Max.)(V_{CE}=5V,I_C=0.5A)
*Low Saturation Voltage:
V_{CE}(sat)=1.0V(Max.)(I_C=3A,I_B=0.3A)
*High Power Dissipation:
P_C=30W (Ta=25°C)
*Complementary to 2SB834



TO-220

1:BASE 2:COLLECTOR 3:EMITTER

ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

PARAMETER	SYMBOL	VALUE	UNIT
Maximum Voltages and currents			
Collector to Base Voltage	VCBO	60	V
Collector to Emitter Voltage	VCEO	60	V
Emitter to Base Voltage	VEBO	7	V
Collector Current	IC	3	A
Base Current	IB	0.5	A
Maximum Power Dissipation			
Total Power Dissipation	PD	30	W
Maximum Temperature			
Junction Temperature Range	T_{OPR}	150	°C
Storage Temperature Range	T_{STG}	-55 ~ +150	°C

ELECTRICAL CHARACTERISTICS(Ta=25°C)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN.	TYP.	MAX.	UNIT
Collector-Emitter Breakdown Voltage	BV_{CEO}	I_C=50mA,I_E=0	60			V
Collector Cut-Off Current	I_{CBO}	V_{CB}=60V,I_E=0			100	μA
Emitter Cut-Off Current	I_{EBO}	V_{EB}=7V,I_C=0			100	μA
Collector-Emitter Saturation Voltage	$V_{CE(SAT)}$	I_C=3A, I_B=300mA			1	V
Base-Emitter Saturation Voltage	$V_{BE(ON)}$	V_{CE}=5V, I_C=500mA			1	V
DC Current Gain	hFE	I_C=500mA, V_{CE}=5V	60		300	
Current gain bandwidth product	fT	V_{CE} =5V, I_C =500mA		3		MHZ

CLASSIFICATION of hFE

RANK	O	Y	GR
RANGE	60-120	100-200	150-300