

UTC2SD880 NPNEPITAXIAL PLANAR TRANSISTOR

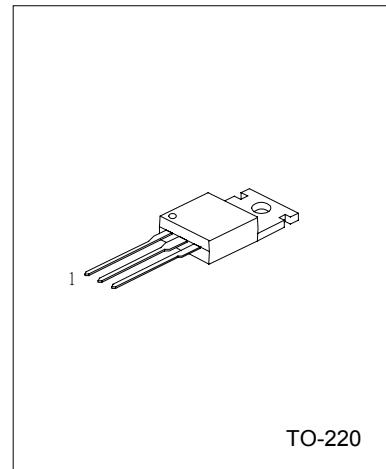
NPN EPITAXIAL TRANSISTOR

DESCRIPTION

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

FEATURE

- *High DC Current Gain:
 $hFE=300(\text{Max.})(VCE=5V, Ic=0.5A)$
- *Low Saturation Voltage:
 $VCE(\text{sat})=1.0V(\text{Max.})(Ic=3A, Ib=0.3A)$
- *High Power Dissipation:
 $P_c=30W (Ta=25^\circ\text{C})$
- *Complementary to 2SB834



1:BASE 2:COLLECTOR 3:EMITTER

ABSOLUTE MAXIMUM RATINGS ($T_a=25^\circ\text{C}$)

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	TOPR	150	°C
Storage Temperature Range	TSTG	-55 ~ +150	°C

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

PARAMETER	SYMBOL	TEST CONDITIONS	MIN.	TYP.	MAX.	UNIT
Collector-Emitter Breakdown Voltage	BVCEO	$I_c=50\text{mA}, I_E=0$	60			V
Collector Cut-Off Current	ICBO	$V_{CB}=60\text{V}, I_E=0$			100	μA
Emitter Cut-Off Current	IEBO	$V_{EB}=7\text{V}, I_c=0$			100	μA
Collector-Emitter Saturation Voltage	VCE(SAT)	$I_c=3\text{A}, I_b=300\text{mA}$			1	V
Base-Emitter Saturation Voltage	VBE(ON)	$V_{CE}=5\text{V}, I_c=500\text{mA}$			1	V
DC Current Gain	hFE	$I_c=500\text{mA}, V_{CE}=5\text{V}$	60		300	
Current gain bandwidth product	fT	$V_{CE} = 5\text{V}, I_c = 500\text{mA}$		3		MHZ

CLASSIFICATION of hFE

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