UTC 2SB798 PNP EPITAXIAL SILICON TRANSISTOR

POWER TRANSISTOR

DESCRIPTION

The UTC 2SB798 is designed for audio frequency power amplifier applications, especially in Hybrid Integrated Circuits.

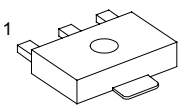
FEATURES

*Low Collector Saturation Voltage:

$V_{CE(sat)}$< -0.4V (I_C= -1.0A,I_B=-100mA)

*Excellent DC Current Gain Linearity :

hFE=100 Typ.(V_{CE}= -1.0V,Ic=-1.0A)



SOT-89

1:EMITTER 2:COLLECTOR 3:BASE

ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

PARAMETER		SYMBOL	RATING	UNIT
Collector-Base Voltage		V_{CBO}	-30	V
Collector-Emitter Voltage		V_{CEO}	-25	V
Emitter-Base Voltage		V_{EBO}	-5.0	V
Collector Current	DC	Ic	-1.0	A
	Pulse(note 1)		-1.5	A
Collector Dissipation (note 2)		P_C	2	W
Junction Temperature		T_j	150	°C
Storage Temperature		T_{STG}	-55 ~ +150	°C

Note 1: PW≦10ms,Duty Cycle≦50%

Note 2: When mounted on a ceramic substrate of 16cm^2×0.7 mm.

ELECTRICAL CHARACTERISTICS(Ta=25°C,unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector Cut-Off Current	I_{CBO}	V_{CB}= -30V , I_E= 0			-100	nA
Emitter Cut-Off Current	I_{EBO}	V_{EB}= -5.0V, Ic= 0			-100	nA
DC Current Gain	h_{FE1}	V_{CE}= -1.0V,Ic= -100mA	90	200	400	
DC Current Gain	h_{FE2}	V_{CE}= -1.0V,Ic= -1.0A	50	100		
Base to Emitter Voltage	V_{BE}	V_{CE}= -6.0V,Ic= -10mA	-600	-640	-700	mV
Collector-Emitter Saturation Voltage	V_{CE}(sat)	Ic= -1.0A,I_B= -0.10A		-0.25	-0.40	V
Base-Emitter Saturation Voltage	V_{BE}(sat)	Ic= -1.0A,I_B= -0.10A		-1.0	-1.2	V
Gain Bandwidth Product	f_T	V_{CE}= -6.0V, I_E= 10 mA		110		MHz
Output Capacitance	Cob	V_{CB}= -6.0V, I_E= 0, f=1MHz		36		pF

Note 3: PW≦350 μs,Duty Cycle≦2%

CLASSIFICATION OF hFE1

MARKING	DM	DL	DK
hFE1	90-180	135-270	200-400

ELECTRICAL CHARACTERISTICS CURVES