UTC 2SA1201 PNP EPITAXIAL SILICON TRANSISTOR

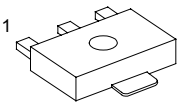
SILICON PNP EPITAXIAL TRANSISTOR

DESCRIPTION

The UTC 2SA1201 is designed for power amplifier and voltage amplifier applications.

FEATURES

*High voltage: V_{CEO}= -120V
*High transition frequency: f_T=120MHz(typ.)
*P_C=1 to 2 W(mounted on ceramic substrate)



SOT-89

1:EMITTER 2:COLLECTOR 3:BASE

ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	V_{CBO}	-120	V
Collector-Emitter Voltage	V_{CEO}	-120	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current	Ic	-800	mA
Base Current	I_B	-160	mA
Collector Power Dissipation	P_C	500	mW
	P_C*	1000	mW
Junction Temperature	T_j	150	°C
Storage Temperature	T_{STG}	-55 ~ +150	°C

* : Mounted on cermic substrate(250mm^2 × 0.8t)

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

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	Ic= -10mA, I_B=0	-120			V
Emitter to Base breakdown voltage	$V_{(BR)EBO}$	I_E= -1mA, I_C=0	-5			V
Collector cut-off current	I_{CBO}	V_{CB}= -120V, I_E=0			-0.1	μA
Emitter cut-off current	I_{EBO}	V_{EB}= -5V, I_C=0			-0.1	μA
DC Current Gain	h_{FE}	V_{CE}= -5V, I_C= -100mA	80		240	
Collector to emitter saturation voltage	$V_{CE(sat)}$	Ic= -500mA, I_B= -50mA			-1.0	V
Base to emitter voltage	V_{BE}	V_{CE}= -5V, I_C= -100mA			-1.0	V
Transition frequency	f_T	V_{CE}= -5V, Ic= -100mA		120		MHz
Collector output capacitance	Cob	V_{CB}= -10V, I_E=0, f=1MHz			30	pF

CLASSIFICATION OF h_{FE}

RANK	O	Y
RANGE	80 - 160	120 - 240

TYPICAL PERFORMANCE CHARACTERISTICS