

UTC TIP42C PNP EPITAXIAL PLANAR TRANSISTOR

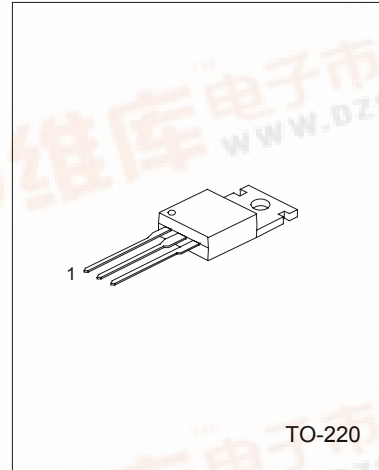
PNP EPITAXIAL PLANAR TRANSISTOR

DESCRIPTION

The UTC TIP42C is a PNP epitaxial planar transistor, designed for using in general purpose amplifier and switching applications.

FEATURE

*Complement to tip41C



TO-220

1:BASE 2:COLLECTOR 3:EMITTER

ABSOLUTE MAXIMUM RATINGS

PARAMETER	SYMBOL	VALUE	UNIT
Collector Base Voltage	V _{CB0}	-100	V
Collector to Emitter Voltage	V _{CEO}	-100	V
Emitter-Base Voltage	V _{EB0}	-5	V
Collector Current(DC)	I _c	-6	A
Collector Current(Pulse)	I _c	-10	A
Base Current	I _B	-2	A
Collector Dissipation(T _c =25°C)	P _c	65	W
Collector Dissipation(T _a =25°C)	P _c	2	W
Junction Temperature	T _j	150	°C
Storage Temperature	T _{stg}	-65 ~ +150	°C

ELECTRICAL CHARACTERISTICS(T_c=25°C)

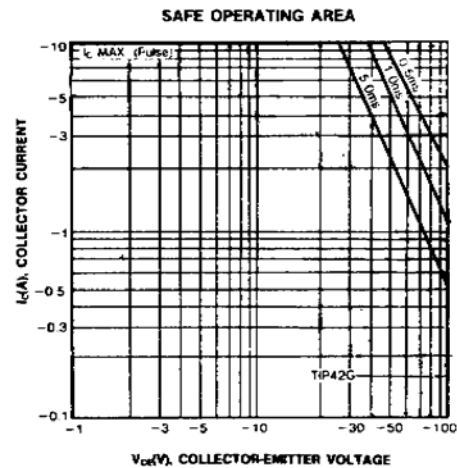
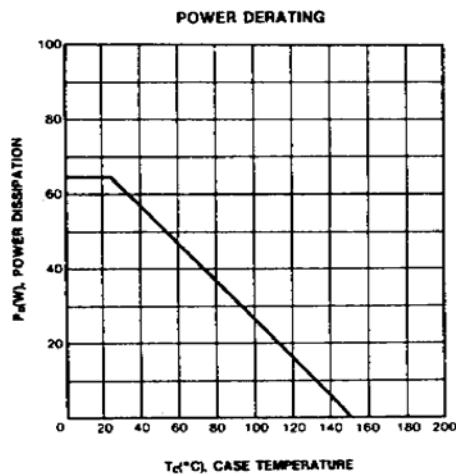
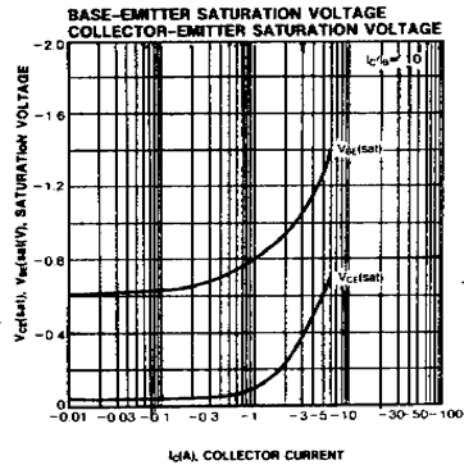
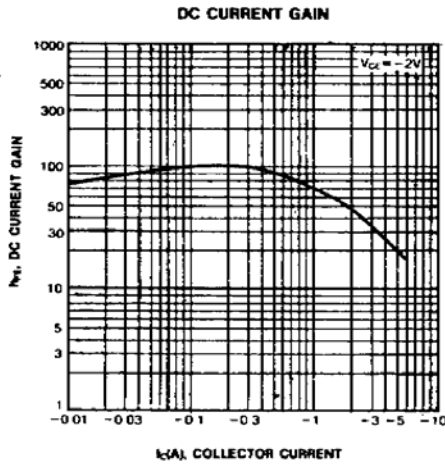
PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector Emitter Sustaining voltage(*)	BV _{CEO}	I _c =-30mA, I _B =0	-100			V
Collector cutoff Current	I _{CEO}	V _{CE} =-60V, I _B =0			-0.7	mA
Collector Cutoff Current	I _{CES}	V _{CE} =-100V, V _{EB} =0			-400	μA
Emitter Cutoff current	I _{EB0}	V _{BE} =-5V, I _c =0			-1	mA
Collector-Emitter Saturation Voltage(*)	V _{CE(sat)}	I _c =-6A, I _B =-600mA			-1.5	V
Base-Emitter On Voltage(*)	V _{BE(on)}	I _c =-6A, V _{CE} =-4V			-2.0	V
DC Current Gain(*)	h _{FE}	I _c =-300mA, V _{CE} =-4V I _c =-3A, V _{CE} =-4V	30 15		75	
Current gain Bandwidth Product	f _T	V _{CE} =-10V, I _c =-500mA, f=1MHz	3			MHz

*Pulse Test: PW<=300μs, Duty Cycle<=2%

UTC UNISONIC TECHNOLOGIES CO. LTD

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