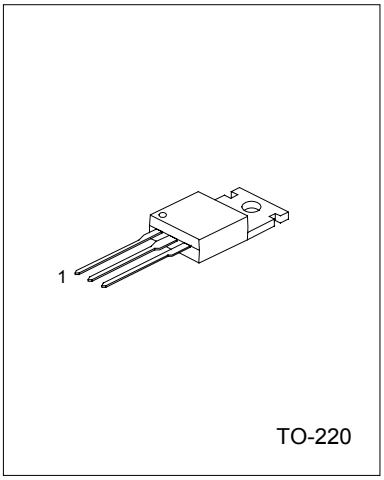
UTC TIP110A PNP EXPITAXIAL PLANAR TRANSISTOR

LOW SATURATION VOLTAGE PNP DARLINGTON TRANSISTOR



TO-220

1:BASE 2:COLLECTOR 3:EMITTER

DESCRIPTION

The UTC TIP110A is designed for using in general purpose amplifier and switching applications.

FEATURE

*Low VCE(sat)
*High current gain

MAXIMUM RATINGS(Ta=25°C)

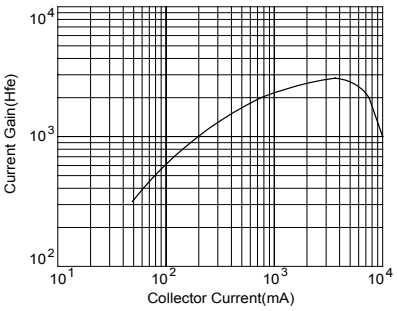
CHARACTERISTICS	SYMBOL	VALUE	UNITS
Collector Base Voltage	V_{CBO}	40	V
Collector to Emitter Voltage	V_{CEO}	30	V
Emitter To base Voltage	V_{EBO}	5	V
Collector Current	I_C	10	A
Junction Temperature	T_j	150(Max)	°C
Storage Temperature	T_{stg}	-55 ~ +150	°C
Total Power Dissipations	P_D	65	W

CHARACTERISTICS(Ta=25°C)

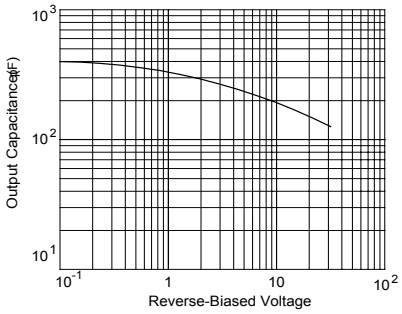
SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
BV_{CEO}	I_C=100mA	30			V
I_{CBO}	V_{CB}=40V			1	μA
I_{CEO}	V_{CE}=20V			1	μA
I_{EBO}	V_{EB}=5V			100	nA
V_{CE}(SAT)	I_C=10A,I_B=10mA			2.0	V
V_{BE}(ON)	I_C=5mA,V_{CE}=2.0V			2.0	V
h_{FE1}	I_C=500mA,V_{CE}=2.0V	2		60	K
h_{FE2}	I_C=10A,V_{CE}=2.0V	1	20	60	K

TYPICAL PERFORMANCE CHARACTERISTICS

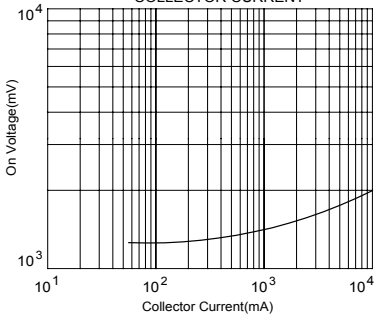
CURRENT GAIN VS.
COLLECTOR CURRENT



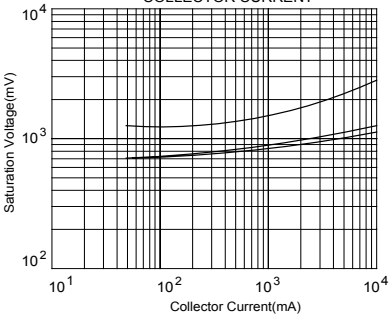
OUTPUT CAPACITANCE VS.
REVERSE-BIASED VOLTAGE



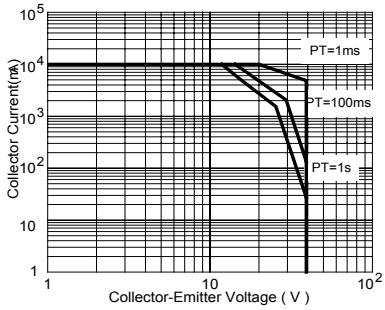
ON VOLTAGE VS.
COLLECTOR CURRENT



SATURATIION VOLTAGE VS.
COLLECTOR CURRENT



SAFE OPERATING AREA



SWITCHING TIMES VS.
COLLECTOR CURRENT