



TIP110A

Preliminary

PNP SILICON TRANSISTOR

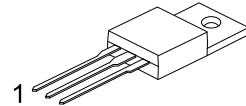
LOW SATURATION VOLTAGE PNP DARLINGTON TRANSISTOR

■ DESCRIPTION

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

■ FEATURES

- * Low $V_{CE(SAT)}$
- * High Current Gain



TO-220

■ ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
TIP110AL-TA3-T	TIP110AG-TA3-T	TO-220	B	C	E	Tube

TIP110AL-AE3-T (1) Packing Type (2) Package Type (3) Lead Plating	(1) T: Tube (2) TA3: TO-220 (3) G: Halogen Free, L: Lead Free
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■ **ABSOLUTE MAXIMUM RATINGS** (Ta=25°C, unless otherwise specified)

PARAMETER	SYMBOL	RATINGS	UNIT
Collector to Base Voltage	V_{CBO}	-45	V
Collector to Emitter Voltage	V_{CEO}	-35	V
Emitter to Base Voltage	V_{EBO}	-5	V
Collector Current	I_C	-10	A
Power Dissipation	P_D	65	W
Junction Temperature	T_J	150	°C
Storage Temperature	T_{STG}	-55 ~ +150	°C

Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged.

Absolute maximum ratings are stress ratings only and functional device operation is not implied.

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

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Base Breakdown Voltage	BV_{CBO}	$I_C = -10mA, I_E = 0A$	-45			
Collector-Emitter Breakdown Voltage	BV_{CEO}	$I_C = -1mA, I_B = 0A$	-35			V
Emitter-Base Breakdown Voltage	BV_{EBO}	$I_E = -10mA, I_C = 0A$	-5			
Collect Cut-off Current	I_{CBO}	$V_{CB} = -45V, I_E = 0A$			-4	μA
Collector-Emitter Cut-Off Current	I_{CEO}	$V_{CE} = -35V, I_B = 0A$			-10	μA
Emitter Cut-off Current	I_{EBO}	$V_{BE} = -5V, I_C = 0A$			-2.0	mA
Collector-Emitter Saturation Voltage	$V_{CE(SAT)}$	$I_C = -10A, I_B = -0.1A$			-2.0	V
Base-Emitter On Voltage	$V_{BE(ON)}$	$V_{CE} = -2.0V, I_C = -5mA$			-2.0	V
DC Current Gain	h_{FE1}	$V_{CE} = -2.0V, I_C = -0.5A$	2000		60000	
	h_{FE2}	$V_{CE} = -2.0V, I_C = -10A$	1000		60000	

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