UTC UNISONIC TECHNOLOGIES CO., LTD

TIP41C

NPN PLANAR TRANSISTOR

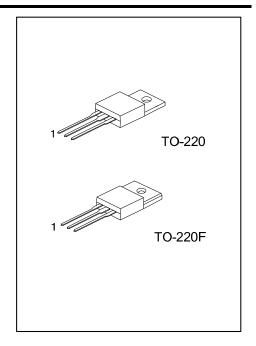
NPN EXPITAXIAL PLANAR TRANSISTOR

DESCRIPTION

The UTC TIP41C is a NPN expitaxial planar transistor, designed for using in general purpose amplifier and switching applications.

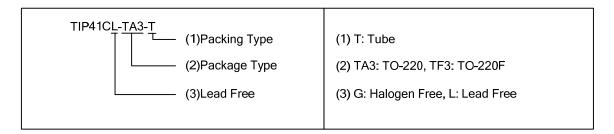
FEATURE

* Complement to TIP42C



ORDERING INFORMATION

Ordering Number		Doolsono	Pin Assignment			Dooking	
Lead Free	Halogen Free	Package	1	2	3	Packing	
TIP41CL-TA3-T	TIP41CG-TA3-T	TO-220	В	С	Е	Tube	
TIP41CL-TF3-T	TIP41CG-TF3-T	TO-220F	В	С	Е	Tube	



www.unisonic.com.tw 1 of 3 QW-R203-008.D

■ **ABSOLUTE MAXIMUM RATINGS** (T_C=25°C, unless otherwise specified)

PARAMETER		SYMBOL	RATING	UNIT		
Collector Base Voltage		V_{CBO}	100	V		
Collector to Emitter Voltage		$V_{\sf CEO}$	100	V		
Emitter-Base Voltage		V_{EBO}	5	V		
Collector Current		DC	ı	6	Α	
		Pulse	Ic	10	Α	
Base Current		I _B	2	Α		
Collector Dissipation	T _C =25°C	TO-220	Pc	65	W	
		TO-220F		22		
	T _A =25°C	TO-220		2		
		TO-220F		0.7	W	
Junction Temperature		T_J	150	°C		
Storage Temperature		T_{STG}	-65 ~ + 150	°C		

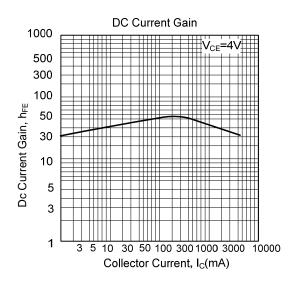
Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.

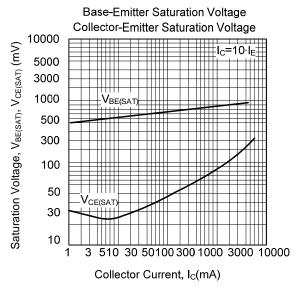
■ ELECTRICAL CHARACTERISTICS (T_C=25°C)

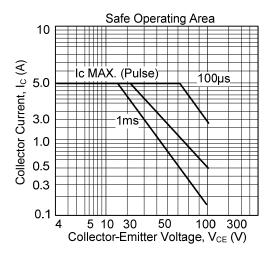
PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector Emitter Sustaining Voltage (Note)	V_{CEO}	I _C =30mA, I _B =0	100			V
Collector Cutoff Current	I _{CEO}	$V_{CE}=60V$, $I_{B}=0$			0.7	mΑ
Collector Cutoff Current	I _{CES}	V _{CE} =100V, V _{EB} =0			400	μΑ
Emitter Cutoff Current	I _{EBO}	V _{EB} =5V, I _C =0			1	mΑ
Collector-Emitter Saturation Voltage (Note)	V _{CE(SAT)}	I _C =6A, I _B =600mA			1.5	V
Base-Emitter On Voltage (Note)	$V_{BE(ON)}$	I _C =6A, V _{CE} =4V			2.0	V
DC Current Gain (Note)	h _{FE1}	I _C =300mA, V _{CE} =4V	30			
DC Current Gain (Note)	h _{FE2}	$I_C=3A$, $V_{CE}=4V$	15		75	
Current Gain Bandwidth Product	f _T	V _{CE} =10V, I _C =500mA, f=1MHz	3			MHz

Note: Pulse Test: $P_W \le 300 \mu s$, Duty Cycle $\le 2\%$

TYPICAL CHARACTERISTICS







UTC assumes no responsibility for equipment failures that result from using products at values that exceed, even momentarily, rated values (such as maximum ratings, operating condition ranges, or other parameters) listed in products specifications of any and all UTC products described or contained herein. UTC products are not designed for use in life support appliances, devices or systems where malfunction of these products can be reasonably expected to result in personal injury. Reproduction in whole or in part is prohibited without the prior written consent of the copyright owner. The information presented in this document does not form part of any quotation or contract, is believed to be accurate and reliable and may be changed without notice.