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SPC-F005.DWG

REVISIONS

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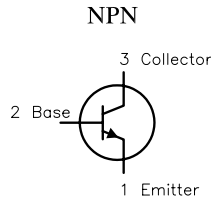
DCP #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
1885	A	RELEASED	BYF	02/03/06	HO	2/6/06	JWM	2/6/06

**Description:** The TIP41C is a silicon epitaxial-base NPN power transistor in a TO220 type plastic package intended for use in power linear and switching applications.



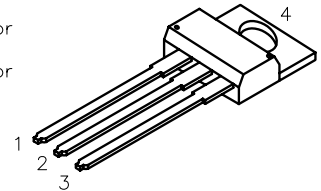
**Absolute Maximum Ratings:**

- Collector-Base Voltage,  $V_{CBO} = 100V$
- Collector-Emitter Voltage,  $V_{CEO} = 60V$
- Emitter-Base Voltage,  $V_{EBO} = 5V$
- Continuous Collector Current,  $I_C = 6A$
- Base Current,  $I_B = 2A$
- Total Device Dissipation ( $T_C = +25^\circ C$ ),  $P_D = 65W$
- Operating Junction Temperature Range,  $T_J = +150^\circ C$
- Storage Temperature Range,  $T_{stg} = -65^\circ C$  to  $+150^\circ C$
- Thermal Resistance, Junction-to-Case,  $R_{thJC} = 1.92^\circ C/W$



**Pin Configuration:**

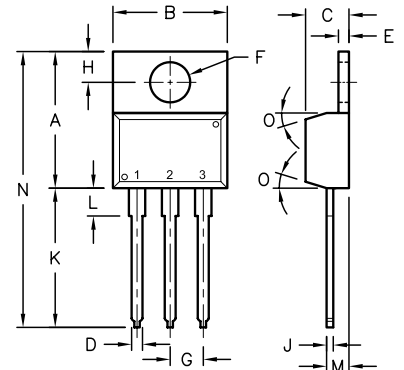
1. Base
2. Collector
3. Emitter
4. Collector



**Electrical Characteristics: ( $T_C = +25^\circ C$  unless otherwise specified)**

Parameter	Symbol	Test Conditions	Min	Max	Unit
<b>OFF Characteristics</b>					
Collector-Emitter Breakdown Voltage (Note 1)	$V_{(BR)CEO}$	$I_C = 30mA, I_B = 0$	60	-	V
Collector Cut-Off Current	$I_{CEO}$	$V_{CB} = 30V, I_B = 0$	-	0.7	mA
Emitter Cut-Off Current	$I_{EBO}$	$V_{EB} = 5V, I_C = 0$	-	1	mA
<b>ON Characteristics (Note 1)</b>					
DC Current Gain	$h_{FE}$	$V_{CE} = 4V, I_C = 0.3A$	30	-	-
		$V_{CE} = 4V, I_C = 3A$	15	75	-
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 6A, I_B = 0.6A$	-	1.5	V
Base-Emitter On Voltage	$V_{BE(on)}$	$I_C = 6A, V_{CE} = 4V$	-	2	V
<b>Small-Signal Characteristics</b>					
Current Gain-Bandwidth Product	$f_T$	$V_{CE} = 10V, I_C = 500mA, f = 1MHz$	3	-	MHz

Note 1. Pulsed: Pulse Duration = 300µs, Duty Cycle = 1.5%.



Dimensions	A	B	C	D	E	F	G	H	J	K	L	M	N	O
Min.	14.42	9.63	3.56	-	1.15	3.75	2.29	2.54	-	12.70	2.80	2.03	-	7
Max.	16.51	10.67	4.83	0.90	1.40	3.88	2.79	3.43	0.56	14.73	4.07	2.92	31.24	

DISCLAIMER: ALL STATEMENTS AND TECHNICAL INFORMATION CONTAINED HEREIN ARE BASED UPON INFORMATION AND/OR TESTS WE BELIEVE TO BE ACCURATE AND RELIABLE. SINCE CONDITIONS OF USE ARE BEYOND OUR CONTROL, THE USER SHALL DETERMINE THE SUITABILITY OF THE PRODUCT FOR THE INTENDED USE AND ASSUME ALL RISK AND LIABILITY WHATSOEVER IN CONNECTION THEREWITH.

TOLERANCES: UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE FOR REFERENCE PURPOSES ONLY.

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DRAWING TITLE:			
Power Transistor, Silicon, TO-220, NPN			
SIZE	DWG. NO.	ELECTRONIC FILE	REV
A	TIP41A	01H1005.DWG	A
SCALE: NTS	U.O.M.: MILLIMETERS	SHEET: 1 OF 1	