

## **Features**

- Halogen Free Available Upon Request By Adding Suffix "-HF"
- · Epoxy Meets UL 94 V-0 Flammability Rating
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix Designates RoHS Compliant. See Ordering Information)

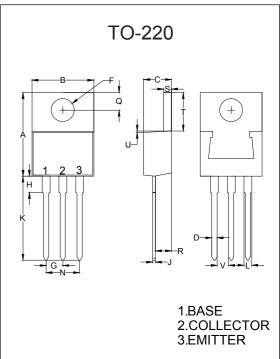
# Maximum Ratings @ 25°C Unless Otherwise Specified

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Thermal Resistance: 4.167°C/W Junction to Case
- Thermal Resistance: 62.5°C/W Junction to Ambient

Parameter		Symbol	Rating	Unit
	TIP30		-40	V
Collector-Base	TIP30A	V <sub>CBO</sub>	-60	
Voltage	TIP30B	V CBO	-80	
	TIP30C		-100	
	TIP30		-40	V
Collector-Emitter Voltage	TIP30A	V <sub>CEO</sub>	-60	
	TIP30B	V CEO	-80	
	TIP30C		-100	
Emitter-Base Voltage	V <sub>EBO</sub>	-5	V	
Continuous Collector C	I <sub>C</sub>	-1	Α	
Peak Collector Current	I <sub>CM</sub>	-3	А	
Base Current	I <sub>B</sub>	-0.4	Α	
Power Dissipation @To	P <sub>D</sub>	30	W	
Power Dissipation @T	$P_{D}$	2	W	

Note: 1.High Temperature Solder Exemption Applied, see EU Directive Annex 7.

# PNP Silicon Power Transistors



DIMENSIONS					
DIM INCI		HES M		IM	NOTE
Dilvi	MIN	MAX	MIN	MAX	NOTE
Α	0.560	0.625	14.22	15.88	
В	0.380	0.420	9.65	10.67	
С	0.140	0.190	3.56	4.82	
D	0.020	0.045	0.51	1.14	
F	0.139	0.161	3.53	4.09	Ф
G	0.090	0.110	2.29	2.79	
Н		0.250		6.35	
J	0.012	0.025	0.30	0.64	
K	0.500	0.580	12.70	14.73	
L	0.045	0.060	1.14	1.52	
N	0.190	0.210	4.83	5.33	
Q	0.100	0.135	2.54	3.43	
R	0.080	0.115	2.04	2.92	
S	0.045	0.055	1.14	1.39	
Т	0.230	0.270	5.84	6.86	
U		0.050		1.27	
V	0.045		1.15		



# Electrical Characteristics @ $T_A$ =25°C Unless Otherwise Specified

Parameter		Symbol	Min	Тур	Max	Units	Conditions	
Collector-Emitter Breakdown Voltage	TIP30	V <sub>(BR)CEO</sub>	-40			V	I <sub>C</sub> =-30mA, I <sub>B</sub> =0	
	TIP30A		-60					
	TIP30B		-80					
	TIP30C		-100					
Collector Cutoff Current	TIP30	I <sub>CES</sub>			-200	μA	V <sub>CE</sub> =-40V, V <sub>EB</sub> =0	
	TIP30A				-200	μA	V <sub>CE</sub> =-60V, V <sub>EB</sub> =0	
	TIP30B				-200	μA	V <sub>CE</sub> =-80V, V <sub>EB</sub> =0	
	TIP30C				-200	μA	V <sub>CE</sub> =-100V, V <sub>EB</sub> =0	
Collector Cutoff Current	TIP30	I <sub>CEO</sub>			-300	μA	V <sub>CE</sub> =-30V, I <sub>B</sub> =0	
	TIP30A				-300	μA	V <sub>CE</sub> =-30V, I <sub>B</sub> =0	
	TIP30B				-300	μA	V <sub>CE</sub> =-60V, I <sub>B</sub> =0	
	TIP30C				-300	μA	V <sub>CE</sub> =-60V, I <sub>B</sub> =0	
Emitter Cutoff Current		I <sub>EBO</sub>			-1	mA	$V_{EB}$ =-5V, $I_{C}$ =0	
DC Current Gain		h <sub>FE(1)</sub>	40				$V_{CE}$ =-4V, $I_{C}$ =-0.2A	
		h <sub>FE(2)</sub>	15		75		$V_{CE}$ =-4V, $I_{C}$ =-1A	
Collector-Emitter Saturation Voltage		V <sub>CE(sat)</sub>			-0.7	V	I <sub>C</sub> =-1A, I <sub>B</sub> =-125mA	
Base-Emitter On Voltage		V <sub>BE(on)</sub>			-1.3	V	$V_{CE}$ =-4V, $I_{C}$ =-1A	
Transition Frequency		f <sub>T</sub>	3			MHz	V <sub>CE</sub> =-10V, I <sub>C</sub> =-200mA, f=1MHz	
Small-Signal Current Gain		h <sub>fe</sub>	20				I <sub>C</sub> =-0.2A, V <sub>CE</sub> =-10V, f=1KHz	

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# **Ordering Information**

Device	Packing
Part Number-BP	Bulk:50pcs/Tube,1Kpcs/Box,5Kpcs/Carton

Note: Adding "-HF" Suffix For Halogen Free, eg. Part Number-BP-HF

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