

Features

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

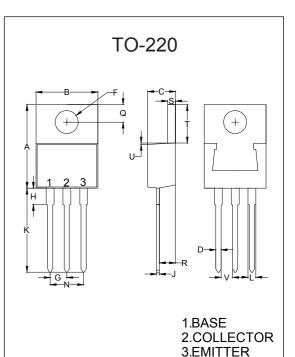
Maximum Ratings @ 25°C Unless Otherwise Specified

- 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	
Collector-Base Voltage	TIP29		40	V
	TIP29A	\/	60	
	TIP29B	V _{CBO}	80	
	TIP29C		100	
	TIP29		40	V
Collector-Emitter Voltage	TIP29A	V	60	
	TIP29B	V _{CEO}	80	
	TIP29C		100	
Emitter-Base Voltage	V _{EBO}	5	V	
Continuous Collector C	I _C	1	Α	
Peak Collector Current	I _{CM}	3	Α	
Base Current	I _B	0.4	Α	
Power Dissipation @To	P_D	30	W	
Power Dissipation @TA	P_{D}	2	W	

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

NPN Silicon Power Transistors



	DIMENSIONS				
DIM IN		HES	MM		NOTE
DIIVI	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	TIP29	V _{(BR)CEO}	40			V		
	TIP29A		60				I _C =30mA, I _B =0	
	TIP29B		80					
	TIP29C		100					
Collector Cutoff Current	TIP29	- I _{CES}			200	μA	V _{CE} =40V, V _{EB} =0	
	TIP29A				200	μA	V _{CE} =60V, V _{EB} =0	
	TIP29B				200	μA	V _{CE} =80V, V _{EB} =0	
	TIP29C				200	μA	V _{CE} =100V, V _{EB} =0	
Collector Cutoff Current	TIP29	I _{CEO}			300	μA	V _{CE} =30V, I _B =0	
	TIP29A				300	μA	V _{CE} =30V, I _B =0	
	TIP29B				300	μA	V _{CE} =60V, I _B =0	
	TIP29C				300	μA	V _{CE} =60V, I _B =0	
Emitter Cutoff Current	1	I _{EBO}			1	mA	V_{EB} =5V, I_C =0	
DC Current Gain		h _{FE(1)}	40				V_{CE} =4V, I_{C} =0.2A	
		h _{FE(2)}	15		75		V _{CE} =4V, I _C =1A	
Collector-Emitter Saturation Voltage		V _{CE(sat)}			0.7	V	I _C =1A, I _B =125mA	
Base-Emitter On Voltage		V _{BE(on)}			1.3	V	V _{CE} =4V, I _C =1A	
Transition Frequency		f _T	3			MHz	V _{CE} =10V, I _C =200mA, f=1MHz	
Small-Signal Current Gain		h _{fe}	20				I _C =0.2A, V _{CE} =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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