

Micro Commercial Components



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- Features Lead Free Finish/RoHS Compliant (Note1) ("P" Suffix designates RoHS Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisure Sensitivity Level 1
- High voltage, high speed NPN power transistors. •
- With TO-220 package

Maximum Patings

Intended for use in converters, inverters, switching regulators, motor control systems.

Symbol	Rating	Rating	Unit
V _{CEO}	Collector-Emitter Voltage	450	V
V _{CBO}	Collector-Base Voltage	1000	V
V _{EBO}	Emitter to Base Voltage	9.0	V
I _{CP}	Peak Collector Current	10	А
Ŀ	Collector Current	5.0	А
Pc	Collector power dissipation	100	W
TJ	Junction Temperature	-55 to +150	°C
T _{STG}	Storage Temperature	-55 to +150	°C

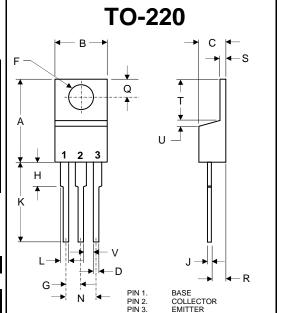
Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Max	Units
OFF CHARA	CTERISTICS			
V _{(BR)CEO}	Collector-Emitter Breakdown Voltage (l _c =100mAdc, l _B =0)	450		Vdc
I _{сво}	Collector-Base Cutoff Current (V _{CB} =1000Vdc,I _E =0)		1.0	mAdc
I _{EBO}	Emitter-Base Cutoff Current (V _{EB} =9.0Vdc, I _C =0)		10	mAdc
ON CHARAC	CTERISTICS			
h _{FE-1}	Forward Current Transfer ratio (b=5.0mAdc, Vc=5.0Vdc)	10	35	
h _{FE-2}	Forward Current Transfer ratio (b=500mAdc, V _{CE} =5.0Vdc)	10	35	
V _{CE(sat)}	Collector-Emitter Saturation Voltage (t _c =2.5Adc, I _B =0.5Adc)		1.5	Vdc
V _{BE(sat)}	Base-Emitter Saturation Voltage (t_=2.5Adc, l _B =0.5Adc)		1.3	Vdc

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

BUT11A

NPN Silicon Power Transistors



	DIME		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
А	.560	.625	14.22	15.88	
В	.380	.420	9.65	10.67	
С	.140	.190	3.56	4.82	
D	.020	.045	0.51	1.14	
F	.139	.161	3.53	4.09	Ø
G	.190	.110	2.29	2.79	
Н		.250		6.35	
J	.012	.025	0.30	0.64	
К	.500	.580	12.70	14.73	
L	.045	.060	1.14	1.52	
Ν	.190	.210	4.83	5.33	
Q	.100	.135	2.54	3.43	
R	.080	.115	2.04	2.92	
S	.045	.055	1.14	1.39	
Т	.230	.270	5.84	6.86	
U		.050		1.27	
V	.045		1.15		

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Ordering Information :

Device	Packing
Part Number-BP	Bulk; 1Kpcs/Box

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