

# 3DA4793

## NPN Silicon Power Transistors

### Features

- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Collector Power Dissipation  $P_{CM}: 2W(T_A=25^{\circ}C); 20W(T_C=25^{\circ}C)$
- Lead Free Finish/RoHS Compliant (Note1) ("P" Suffix designates RoHS Compliant. See ordering information)
- Halogen free available upon request by adding suffix "-HF"

### Maximum Ratings

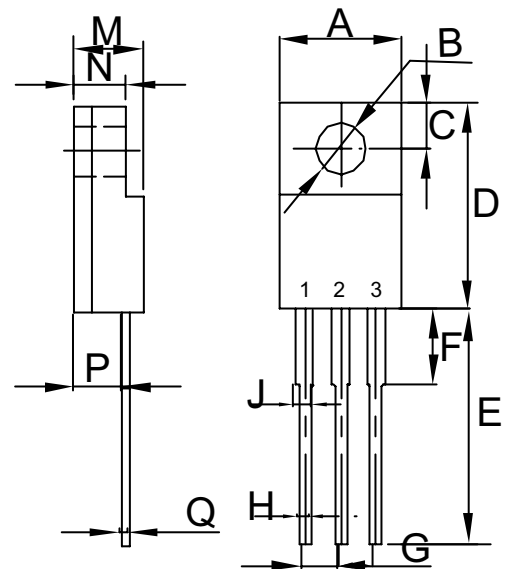
Symbol	Rating	Rating	Unit
$V_{CEO}$	Collector-Emitter Voltage	230	V
$V_{CBO}$	Collector-Base Voltage	230	V
$V_{EBO}$	Emitter-Base Voltage	5.0	V
$I_C$	Collector Current	1.0	A
$P_C$	Collector power dissipation $T_A=25^{\circ}C$	1.5	W
$T_J$	Junction Temperature	-55 to +150	$^{\circ}C$
$T_{STG}$	Storage Temperature	-55 to +150	$^{\circ}C$

### Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Typ	Max	Units
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage ( $I_C=0.1mA$ , $I_E=0$ )	230	---	---	Vdc
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage ( $I_C=1mA$ , $I_B=0$ )	230	---	---	Vdc
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage ( $I_E=100\mu A$ , $I_C=0$ )	5.0	---	---	Vdc
$I_{CBO}$	Collector-Base Cutoff Current ( $V_{CB}=230Vdc$ , $I_E=0$ )	---	---	10	$\mu A$
$I_{EBO}$	Emitter-Base Cutoff Current ( $V_{EB}=5.0Vdc$ , $I_C=0$ )	---	---	10	$\mu A$
$h_{FE}$	Forward Current Transfer ratio ( $I_C=100mA$ , $V_{CE}=5.0Vdc$ )	100	---	320	---
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage ( $I_C=500mA$ , $I_B=50mA$ )	---	---	1.5	Vdc
$f_T$	Transition Frequency ( $V_{CE}=10Vdc$ , $I_C=100mA$ )	30	---	---	MHz

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

### TO-220F



PIN 1. BASE  
 PIN 2. COLLECTOR  
 PIN 3. EMITTER

DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	.392	.408	9.96	10.36	
B	.138		3.50		Φ
C	.106		2.70		
D	.583	.598	14.80	15.20	
E	.520		13.20		
F	.142	.158	3.60	4.00	
G	.100		2.54		
H	.020	.030	0.50	0.75	
J	.043	.053	1.10	1.35	
M	.169	.185	4.30	4.70	
N	.110	.126	2.80	3.20	
P	.098	.114	2.50	2.90	
Q	.020	.030	0.50	0.75	



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### Ordering Information :

Device	Packing
Part Number-BP	Bulk;5Kpcs/Box

Note : Adding "-HF" suffix for halogen free, eg. Part Number-BP-HF

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