

**M·C·C·**

Micro Commercial Components



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**TIP125/126/127**

## Features

- Mounting Torque: 5 in-lbs Maximum
- The complementary NPN types are the TIP121/2/3 respectively
- 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
- Marking : part number
- Halogen free available upon request by adding suffix "-HF"

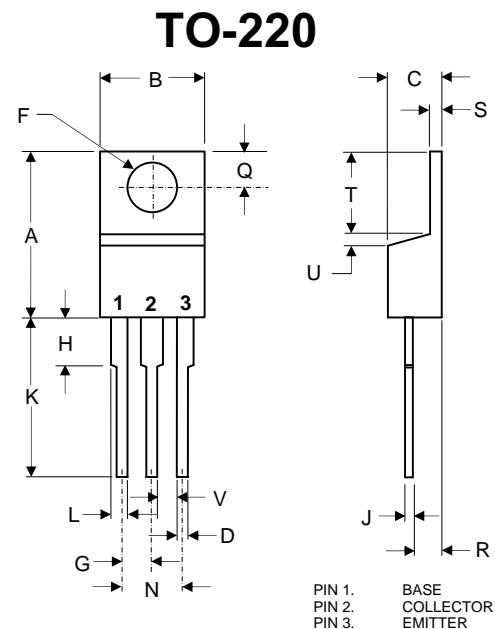
**Absolute Maximum Ratings @  $T_A = 25^\circ\text{C}$  (unless otherwise noted)**

Symbol	Parameter	Value	Unit
$V_{CBO}$ TIP125 TIP126 TIP127	Collector-base voltage (Open emitter)	-60 -80 -100	V
$V_{CEO}$ TIP125 TIP126 TIP127	Collector-emitter voltage (Open base)	-60 -80 -100	V
$V_{EBO}$	Emitter-base Voltage(Open collector)	-5	V
$I_C$	Collector Current	-5	A
$I_{CM}$	Collector Current Pulse	-8	A
$I_B$	Base Current	-0.12	A
$P_C$	Total Device Dissipation( $T_a=25^\circ\text{C}$ )	2	W
	Total Device Dissipation( $T_c=25^\circ\text{C}$ )	40	W
$T_J$	Junction Temperature	150	$^\circ\text{C}$
$T_{STG}$	Storage Temperature Range	-65 to +150	$^\circ\text{C}$

**Electrical Characteristics @  $25^\circ\text{C}$  Unless Otherwise Specified**

Symbol	Parameter	Min	Max	Units
$V_{CEO(SUS)}$ TIP125 TIP126 TIP127	Collector-emitter sustaining voltage ( $I_C=-100\text{mA}$ ; $I_B=0$ )	-60 -80 -100		V
$V_{CE(\text{sat})}$	Collector-emitter Saturation Voltage ( $I_C=-3\text{A}$ $I_B=-0.012\text{A}$ ) ( $I_C=-5\text{A}$ $I_B=-0.02\text{A}$ )		-2.0 -4.0	V
$V_{BE}$	Base-emitter Voltage ( $I_C=-3\text{A}$ ; $V_{CE}=-3\text{V}$ )		-2.5	V
$I_{CBO}$ TIP125 TIP126 TIP127	Collector cut-off current ( $V_{CB}=-60\text{V}$ , $I_E=0$ ) ( $V_{CB}=-80\text{V}$ , $I_E=0$ ) ( $V_{CB}=-100\text{V}$ , $I_E=0$ )	-0.2		mA
$I_{CEO}$ TIP125 TIP126 TIP127	Collector cut-off current ( $V_{CE}=-30\text{V}$ ; $V_{EB}=0$ ) ( $V_{CE}=-40\text{V}$ ; $V_{EB}=0$ ) ( $V_{CE}=-50\text{V}$ ; $V_{EB}=0$ )	-0.5		mA
$I_{EBO}$	Emitter cut-off current ( $V_{EB}=-5\text{V}$ ; $I_C=0$ )		-2.0	mA
$H_{FE}$	DC current gain ( $I_C=0.5\text{A}$ ; $V_{CE}=-3\text{V}$ ) ( $I_C=3.0\text{A}$ ; $V_{CE}=-3\text{V}$ )	1000 1000		
$C_{OB}$	Output capacitance ( $I_E=0$ ; $V_{CB}=-10\text{V}$ , $f=0.1\text{MHz}$ )		300	PF

**Silicon PNP  
Darlington  
Power Transistors**



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.560	.625	14.22	15.88	
B	.380	.420	9.65	10.67	
C	.140	.190	3.56	4.82	
D	.020	.045	0.51	1.14	
F	.139	.161	3.53	4.09	$\emptyset$
G	.190	.110	2.29	2.79	
H	---	.250	---	6.35	
J	.012	.025	0.30	0.64	
K	.500	.580	12.70	14.73	
L	.045	.060	1.14	1.52	
N	.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	
T	.230	.270	5.84	6.86	
U	-----	.050	-----	1.27	
V	.045	-----	1.15	-----	

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

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## Ordering Information :

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

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

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