



Micro Commercial Components



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D965-T
D965-R

NPN

**Plastic-Encapsulate
Transistors**

Features

- Halogen free available upon request by adding suffix "-HF"
- Power Dissipation: $P_{CM}=0.75W$ @ $T_{amb}=25^{\circ}C$
- Collector Current: $I_{CM}=5A$
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Marking: D965T/R
- Lead Free Finish/Rohs Compliant ("P" Suffix designates Compliant. See ordering information)

Maximum Ratings

Symbol	Rating	Rating	Unit
V_{CEO}	Collector-Emitter Voltage	22	V
V_{CBO}	Collector-Base Voltage	42	V
V_{EBO}	Emitter-Base Voltage	6.0	V
I_C	Collector Current, Continuous	5	A
P_D	Total Device Dissipation	750	mW
T_J	Operating 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	Max	Units
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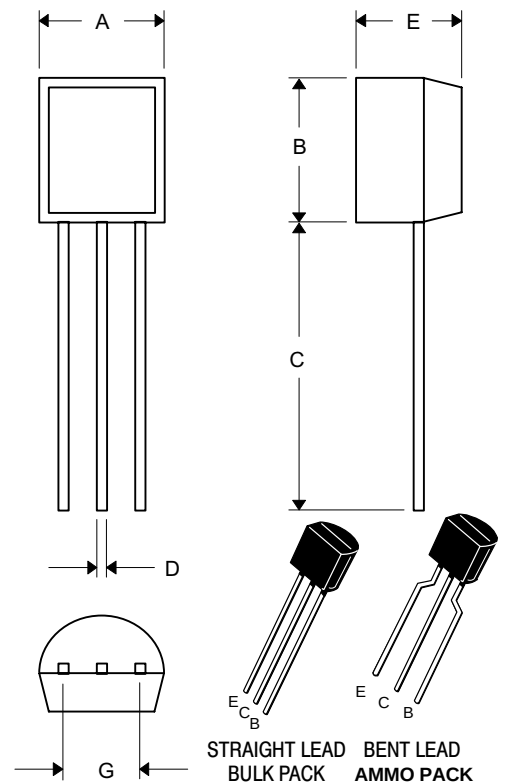
OFF CHARACTERISTICS

$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage* ($I_C=10mA$, $I_B=0$)	22	---	Vdc
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage ($I_C=100\mu A$, $I_E=0$)	42	---	Vdc
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage ($I_E=100\mu A$, $I_C=0$)	6.0	---	Vdc
I_{CBO}	Collector Cutoff Current ($V_{CB}=20Vdc$, $I_E=0$)	---	100	nAdc
I_{EBO}	Base Cutoff Current ($V_{EB}=3.0Vdc$, $I_C=0$)	---	100	nAdc
H_{FE}	DC Current Gain ($V_{CE}=2V$, $I_C=0.15mA$) ($V_{CE}=2V$, $I_C=500mA$) ($V_{CE}=2V$, $I_C=2000mA$)	150 340 150	---	
$V_{CE(sat)}$	Collector-emitter Saturation Voltage ($I_C=3000mA$, $I_B=100mA$)	---	0.35	V

Classification of H_{FE} @ ($V_{CE}=2V$, $I_C=500mA$)

Rank	R	T
Range	340-600	560-950

TO-92



DIMENSIONS

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.175	.185	4.45	4.70	
B	.175	.185	4.45	4.70	
C	.500	---	12.70	---	
D	.016	.020	0.41	0.63	
E	.135	.145	3.43	3.68	
G	.095	.105	2.42	2.67	Straight Lead
	.173	.220	4.40	5.60	Bent Lead

* For ammo packing detailed specification, click here to visit our website of product packaging for details.

www.mccsemi.com

Ordering Information :

Device	Packing
Part Number-AP	Ammo Packing: 20Kpcs/Carton
Part Number-BP	Bulk: 100Kpcs/Carton

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

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