



Micro Commercial Components



Micro Commercial Components  
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## D965-T D965-R

### 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

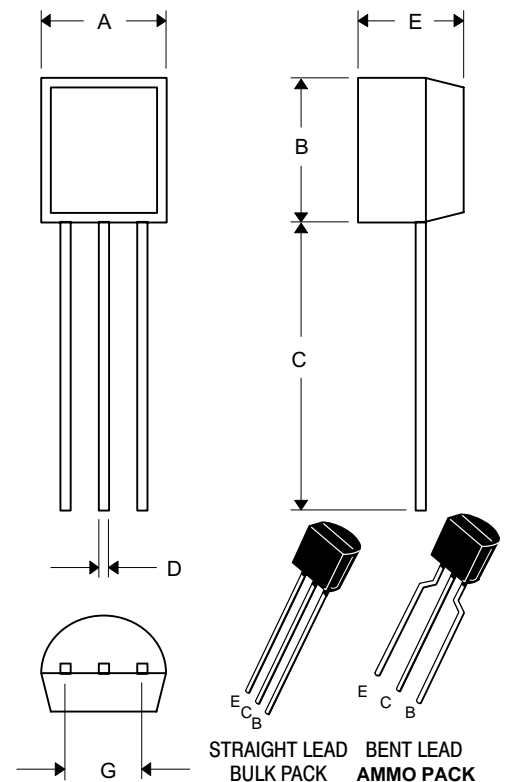
Symbol	Parameter	Min	Max	Units
<b>OFF CHARACTERISTICS</b>				
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage* ( $I_C=10mA_{dc}$ , $I_B=0$ )	22	---	Vdc
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage ( $I_C=100\mu A_{dc}$ , $I_E=0$ )	42	---	Vdc
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage ( $I_E=100\mu A_{dc}$ , $I_C=0$ )	6.0	---	Vdc
$I_{CBO}$	Collector Cutoff Current ( $V_{CB}=20V_{dc}$ , $I_E=0$ )	---	100	nAdc
$I_{EBO}$	Base Cutoff Current ( $V_{EB}=3.0V_{dc}$ , $I_C=0$ )	---	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

## NPN Plastic-Encapsulate Transistors

### 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.



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### 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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