



**Micro Commercial Components**

Micro Commercial Components  
 20736 Marilla Street Chatsworth  
 CA 91311  
 Phone: (818) 701-4933  
 Fax: (818) 701-4939

**D965-T  
 D965-R**

**Features**

- Power Dissipation:  $P_{CM}=0.75W$  @  $T_{amb}=25^{\circ}C$
- Collector Current:  $I_{CM}=5A$
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Marking: D965R/T

**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
--------	-----------	-----	-----	-------

**OFF CHARACTERISTICS**

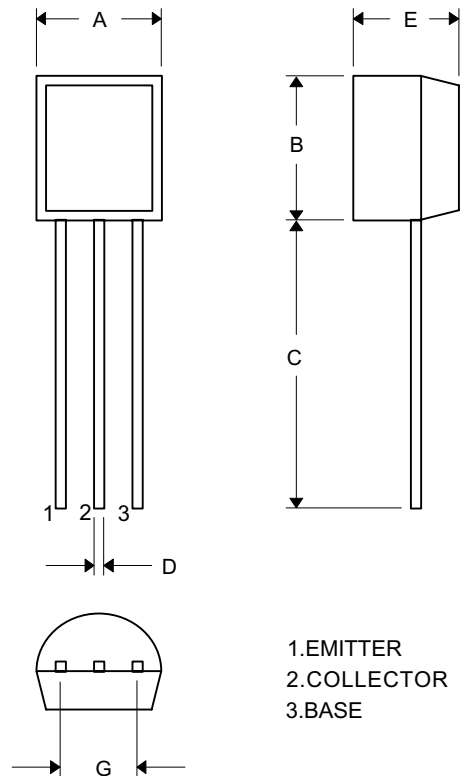
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage* ( $I_C=10mA$ , $I_B=0$ )	22	---	Vdc
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage ( $I_C=100\mu A$ , $I_E=0$ )	42	---	Vdc
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage ( $I_E=100\mu A$ , $I_C=0$ )	6.0	---	Vdc
$I_{CBO}$	Collector Cutoff Current ( $V_{CB}=20Vdc$ , $I_E=0$ )	---	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	---	950
$V_{CE(sat)}$	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**



DIM	DIMENSIONS				NOTE
	INCHES		MM		
A	.170	.190	4.33	4.83	
B	.170	.190	4.30	4.83	
C	.550	.590	13.97	14.97	
D	.010	.020	0.36	0.56	
E	.130	.160	3.30	3.96	
G	.010	.104	2.44	2.64	



TM

Micro Commercial Components

**\*\*\*IMPORTANT NOTICE\*\*\***

*Micro Commercial Components Corp.* reserves the right to make changes without further notice to any product herein to make corrections, modifications, enhancements, improvements, or other changes. *Micro Commercial Components Corp.* does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights, nor the rights of others. The user of products in such applications shall assume all risks of such use and will agree to hold *Micro Commercial Components Corp.* and all the companies whose products are represented on our website, harmless against all damages.

**\*\*\*APPLICATIONS DISCLAIMER\*\*\***

Products offer by *Micro Commercial Components Corp.* are not intended for use in Medical, Aerospace or Military Applications.