



# DIONICS INC.

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# DTN9000, 9001 DTN9000T, 9001T

NPN HIGH VOLTAGE TRANSISTOR

## MAXIMUM RATINGS

RATING		SYMBOL	UNIT
Collector - Emitter Voltage	9000 9001	$V_{CE0}$	400V 350V $V_{DC}$
Collector - Base Voltage	9000 9001	$V_{CB}$	450V 400V $V_{DC}$
Collector - Emitter Voltage	9000 9001	$BV_{CER}$	400V 350V $V_{DC}$
Emitter - Base Voltage		$BV_{EBO}$	6 $V_{DC}$
Collector Current		$I_C$	500 mA
Operating & Storage Temperature		$T_J, T_{STG}$	-55° to +150°C

## THERMAL CHARACTERISTICS

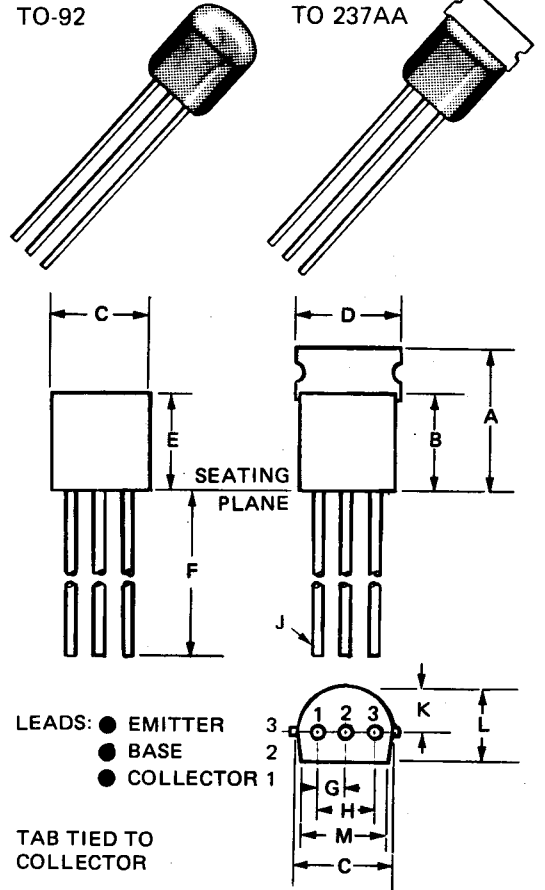
	DTN9000/1	DTN9000/1T	
Thermal Resistance Free Air Infinite Heat Sink	200 —	150 35	OC/W

## ELECTRICAL CHARACTERISTICS $T_C = 25^\circ C$

CHARACTERISTIC	SYMBOL	MIN	MAX	UNIT
Collector - Base Breakdown Voltage $I_{CBO} = 100 \mu A$	9000 9001 $BV_{CBO}$	450 400		$V_{DC}$
Collector - Emitter Breakdown Voltage $I_C = 0.5mA, I_B = 0$	9000 9001 $BV_{CEO}$	400 350		$V_{DC}$
Emitter - Base Breakdown Voltage $I_{EBO} = 10 \mu A$	$BV_{EBO}$	6		$V_{DC}$
Collector - Base Cutoff Current $V_{CBO} = 300V$	$I_{CBO}$		200	nA
Collector - Base Cutoff Current $V_{CE} = 300V, R_{BE} = 10K\Omega$	$I_{CER}$		2.0	$\mu A$
Current Gain Common Emitter $V_{CE} = 10V, I_C = 5 mA$	9000 9001 $H_{FE}$	20 30		
Current Gain Common Emitter $V_{CE} = 10V, I_C = 20 mA$	9000 9001 $H_{FE}$	30 40		
Collector - Emitter Saturation Voltage $I_C = 20mA, I_B = 2mA$	$V_{CE(SAT)}$		0.5	$V_{DC}$
Base - Emitter - Saturation Voltage $I_C = 20mA, I_B = 2mA$	$V_{BE(SAT)}$		1.3	$V_{DC}$
Current - Gain Bandwidth Product $I_C = 10mA, V_{CE} = 10V f = 5.0 mHz$	$f_t$		35 TYP	MHz

DTN 9000/1  
TO-92

DTN 9000/1T  
TO 237AA



SYMBOL	INCHES	MILLIMETERS
A	.260/.270	6.60/6.86
B	.175/.185	4.44/4.70
C	.175/.205	4.96/5.20
D	.195/.205	4.95/5.21
E	.170/.210	4.58/5.33
F	.50 MIN	12.70 MIN
G	.045/.055	1.14/1.40
H	.095/.105	2.41/2.67
J	.016/.021	.41/.533
K	.08/.105	2.03/2.67
L	.125/.165	3.94/4.19
M	.135 MIN	3.43 MIN.