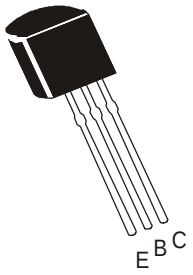
RECTRON SEMICONDUCTOR
TECHNICAL SPECIFICATION

2N5551

TO-92 NPN HIGH VOLTAGE TRANSISTOR



For Lead Free Parts, Device Part # will be Prefixed with "T"

High Voltage NPN Transistor For General Purpose And Telephony Applications.

ABSOLUTE MAXIMUM RATINGS (Ta=25deg C unless otherwise specified)

DESCRIPTION	SYMBOL	VALUE	UNIT
Collector -Emitter Voltage	VCEO	160	V
Collector -Base Voltage	VCBO	180	V
Emitter -Base Voltage	VEBO	6.0	V
Collector Current Continuous	IC	600	mA
Power Dissipation @Ta=25 degC	PD	625	mW
Derate Above 25 deg C		5.0	mw/deg C
Power Dissipation @Tc=25 degC	PD	1.5	W
Derate Above 25 deg C		12	mw/deg C
Operating And Storage Junction Temperature Range	Tj, Tstg	-55 to +150	deg C
THERMAL RESISTANCE			
Junction to Case	Rth(j-c)	125	deg C/W
Junction to Ambient	Rth(j-a) (1)	357	deg C/W

(1) Rth (j-a) is measured with the device soldered into a typical printed circuit board

ELECTRICAL CHARACTERISTICS (Ta=25 deg C Unless Otherwise Specified)

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Collector -Emitter Voltage	VCEO	IC=1mA,IB=0	160	-	-	V
Collector -Base Voltage	VCBO	IC=100uA.IE=0	180	-	-	V
Emitter -Base Voltage	VEBO	IE=10uA, IC=-0	6.0	-	-	V
Collector-Cut off Current	ICBO	VCB=160V, IE=0	-	-	50	nA
		Ta=100 deg C				
		VCB=160V, IE=0	-	-	50	uA
Emitter-Cut off Current	IEBO	VEB=4V, IC=0	-	-	50	nA
DC Current Gain	hFE*	IC=1mA,VCE=5V	80	-	-	
		IC=10mA,VCE=5V	80	-	250	
		IC=50mA,VCE=5V	30	-	-	
Collector Emitter Saturation Voltage	VCE(Sat)*	IC=10mA,IB=1mA	-	-	0.15	V
		IC=50mA,IB=5mA	-	-	0.2	V
Base Emitter Saturation Voltage	VBE(Sat) *	IC=10mA,IB=1mA	-	-	1.0	V
		IC=50mA,IB=5mA	-	-	1.0	V

ELECTRICAL CHARACTERISTICS Ta=25 deg C Unless Otherwise Specified 2N5551

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Dynamic Characteristics						
Small Si nal Current Gain	hfe	IC=1mA, VCE=10V f=1KHz	50	-	200	
Transition Frequency	ft	VCE=10V,IC=10mA, f=100MHz	100	-	300	MHz
Output Capacitance	Cob	VCB=10V, IE=0 f=1MHz	-	-	6.0	pF
Input Capacitance	Cib	VEB=0.5V, IC=0 f=1MHz	-	-	20	pF
Noise Figure	NF	VCE=5V, IC=250uA R=1kohm, f=10Hz to 15.7kHz	-	-	8.0	dB

***Pulse Test: Pulse Width=300us, Duty Cycle=2%**

Packaging Information

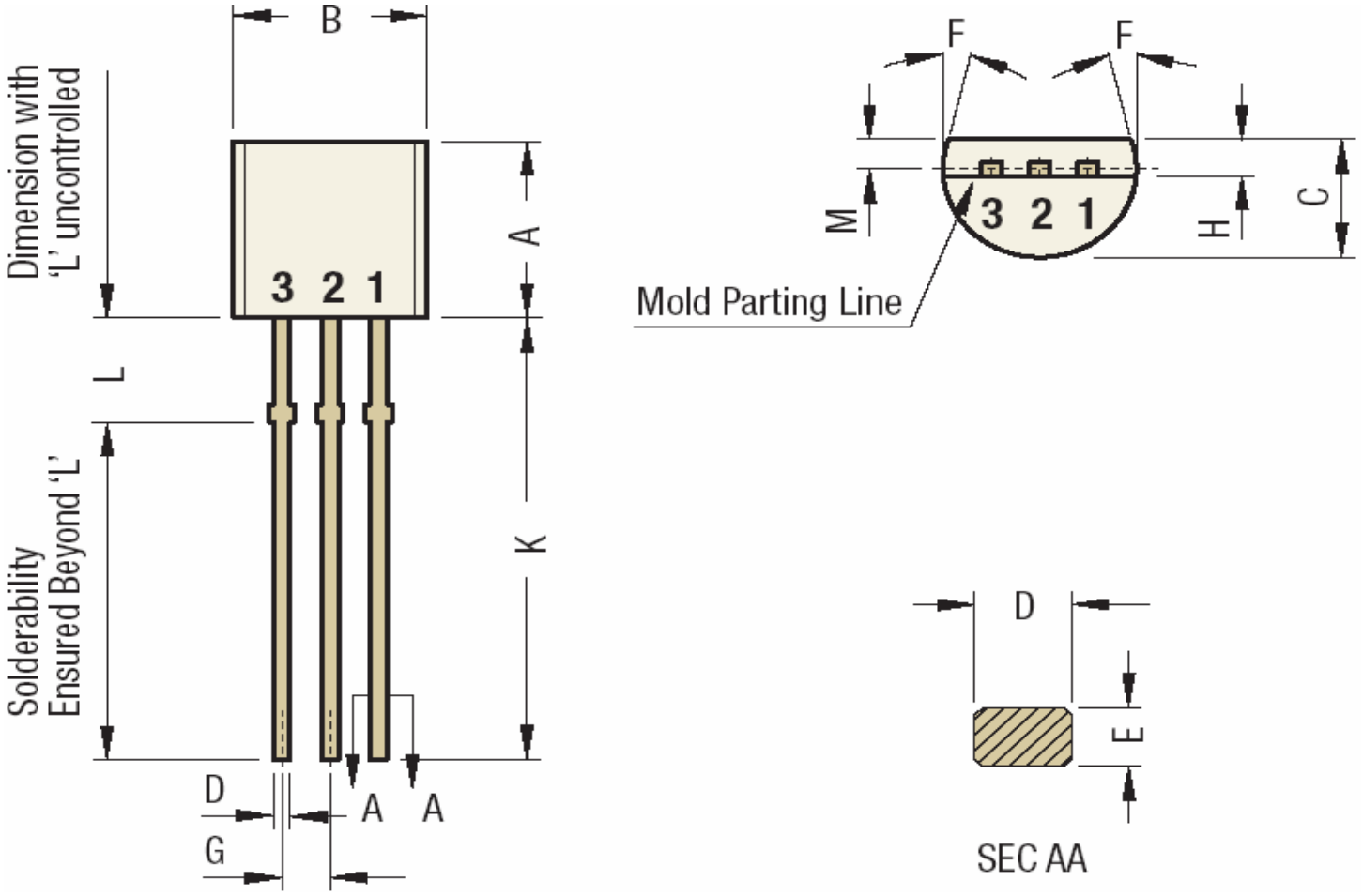
T & A: Tape and Ammo Pack; T & R: Tape and Reel; Bulk: Loose in Poly bags ; Tube: Tube and Ammo Pack; k: 1.000

Package/Case Type	Packaging Type	Std. Packing	Inner Carton			Outer Carton		
		Qty	Qty	Size L x W x H (cm)	Gross Weight (Kg)	Qty	Size L x W x H (cm)	Gross Weight (Kg)
TO-92	Bulk	1,000	5K	19x19x8	1.10	80K	43x40x35	20.0
	T&A	2,000	2K	32x4.5x20	0.70	40K	43x40x35	15.20

2N5551
TO-92
Plastic Package

For Lead Free Parts, Device Part # will be Prefixed with "T"

TO-92 Leaded Plastic Package



DIM	Min	Max
A	4.32	5.33
B	4.45	5.20
C	3.18	4.19
D	0.40	0.55
E	0.30	0.55
F	5º	

All Dimensions are in mm

DIM	Min	Max
G	1.14	1.40
H	1.20	1.40
K	12.7	
L	1.982	2.082
M	1.03	1.20

Pin 1 **Collector**
Pin 2 **Base**
Pin 3 **Emitter**

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