



Continental Device India Limited

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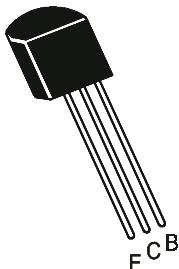


## NPN SILICON HIGH VOLTAGE TRANSISTOR

CSC2229Y

TO-92

BCE



**Black & White TV Video Output Amplifier, High Voltage Switching & Audio Amplifier Driver Stage Applications.**

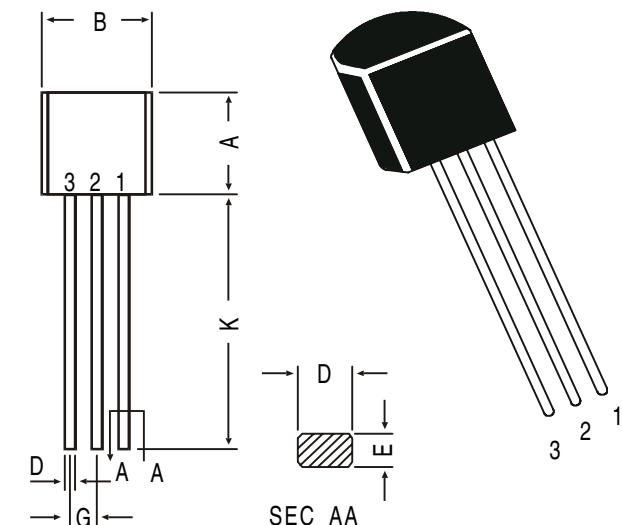
### ABSOLUTE MAXIMUM RATINGS(Ta=25deg C unless otherwise specified )

DESCRIPTION	SYMBOL	VALUE	UNIT
Collector -Base Voltage	VCBO	200	V
Collector -Emitter Voltage	VCEO	150	V
Emitter Base Voltage	VEBO	5.0	V
Collector Current	IC	500	mA
Power Dissipation	PD	625	mW
Operating And Storage Junction	T <sub>j</sub> , T <sub>stg</sub>	-55 to +150	deg C
Temperature Range			

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

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Collector Cut off Current	ICBO	VCB=200V, IE=0	-	-	0.1	uA
Emitter Cut off Current	IEBO	VEB=5V, IC=0	-	-	0.1	uA
Collector -Emitter Voltage	VCEO	IC=1mA, IB=0	150	-	-	V
DC Current Gain	hFE	IC=10mA, VCE=5V	120	-	360	
Collector Emitter Saturation Voltage	VCE(Sat)	IC=10mA, IB=1mA	-	-	0.5	V
Base Emitter Saturation Voltage	VBE(Sat)	IC=10mA, IB=1mA	-	-	1.0	V
<u>Dynamic Characteristics</u>						
Collector Output Capacitance	C <sub>ob</sub>	VCB=10V, IE=0, f=1MHz	-	3.5	5.0	pF
Transition Frequency	f <sub>t</sub>	VCE=30V, IC=10mA,	-	120	-	MHz

## TO-92 Plastic Package

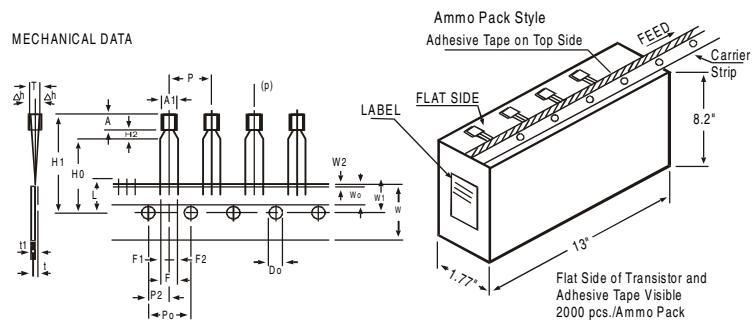


DIM	MIN.	MAX.
A	4.32	5.33
B	4.45	5.20
C	3.18	4.19
D	0.41	0.55
E	0.35	0.50
F	5 DEG	
G	1.14	1.40
H	1.14	1.53
K	12.70	—

All dimensions in mm.

- PIN CONFIGURATION**
1. BASE
  2. COLLECTOR
  3. Emitter

## TO-92 Transistors on Tape and Ammo Pack



All dimensions in mm unless specified otherwise

ITEM	SYMBOL	SPECIFICATION				REMARKS
		MIN.	NOM.	MAX.	TOL.	
BODY WIDTH	A1	4.0		4.8		
BODY HEIGHT	A	4.8		5.2		
BODY THICKNESS	T	3.9		4.2		
PITCH OF COMPONENT	P					
FEED HOLE PITCH	P <sub>0</sub>		12.7	12.7	±0.3	CUMULATIVE PITCH ERROR 1.0 mm/20 PITCH
FEED HOLE CENTRE TO COMPONENT CENTRE	P <sub>2</sub>		6.35		±0.4	TO BE MEASURED AT BOTTOM OF CLINCH
DISTANCE BETWEEN OUTER LEADS	F	5.08			±0.6	
COMPONENT ALIGNMENT	△h	0		1	-0.2	
TAPE WIDTH	W	18			±0.5	
HOLD-DOWN TAPE WIDTH	W <sub>0</sub>	6			±0.2	
HOLE POSITION	W <sub>1</sub>	9			±0.7	
HOLD-DOWN TAPE POSITION	W <sub>2</sub>	0.5			±0.2	
LEAD WIRE CLINCH HEIGHT	H <sub>0</sub>	16			±0.5	
COMPONENT HEIGHT	H <sub>1</sub>		23.25			
LENGTH OF SNIPPED LEADS	L		11.0			
FEED HOLE DIAMETER	D <sub>0</sub>	4			±0.2	
TOTAL TAPE THICKNESS	t		1.2			t1 0.3 - 0.6
LEAD - TO - LEAD DISTANCE	F <sub>1</sub>	2.54			±0.4	
CLINCH HEIGHT	H <sub>2</sub>		3		-0.1	
PULL - OUT FORCE	(P)	6N				

### NOTES

1. MAXIMUM ALIGNMENT DEVIATION BETWEEN LEADS NOT TO BE GREATER THAN 0.2 mm.
2. MAXIMUM NON-CUMULATIVE VARIATION BETWEEN TAPE FEED HOLES SHALL NOT EXCEED 1 mm IN 20 PITCHES.
3. HOLDDOWN TAPE NOT TO EXCEED BEYOND THE EDGE(S) OF CARRIER TAPE AND THERE SHALL BE NO EXPOSURE OF ADHESIVE.
4. NO MORE THAN 3 CONSECUTIVE MISSING COMPONENTS ARE PERMITTED.
5. A TAPE TRAILER, HAVING AT LEAST THREE FEED HOLES ARE REQUIRED AFTER THE LAST COMPONENT.
6. SPLICES SHALL NOT INTERFERE WITH THE SPROCKET FEED HOLES.

## Packing Detail

PACKAGE	STANDARD PACK		INNER CARTON BOX		OUTER CARTON BOX		
	Details	Net Weight/Qty	Size	Qty	Size	Qty	Gr Wt
TO-92 Bulk	1K/polybag	200 gm/1K pcs	3" x 7.5" x 7.5"	5.0K	17" x 15" x 13.5"	80.0K	23 kgs
TO-92 T&A	2K/ammo box	645 gm/2K pcs	12.5" x 8" x 1.8"	2.0K	17" x 15" x 13.5"	32.0K	12.5 kgs

