

## Continental Device India Limited

An ISO/TS16949 and ISO 9001 Certified Company

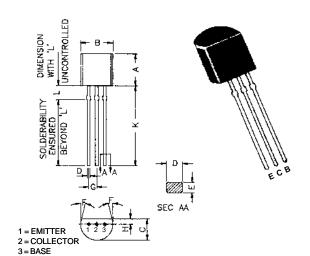


### **TO-92 Plastic Package**

**CSA733** 

# PNP SILICON PLANAR EPITAXIAL TRANSISTOR

Low Frequency Amplifier Complementary to CSC945



DIM	MIN	MAX	
Α	4,32	5,33	
В	4,45	5,20	
С	3,18	4,19	
D	0,41	0,55	
Е	0,35	0,50	
F	5 DEG		
G	1,14	1,40	
Н	1,14	1,53	
K	12,70	_	
L	1.982	2.082	

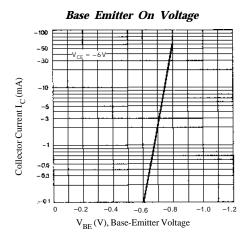
ALL DIMENSIONS IN M.M.

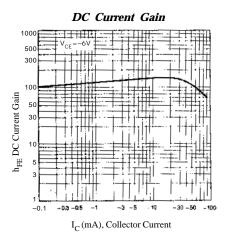
#### ABSOLUTE MAXIMUM RATINGS

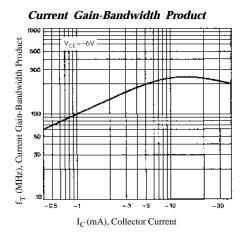
Rating	Symbol	Value	Unit
Collector-Base Voltage	$\mathit{BV}_\mathit{CBO}$	60	V
Collector-Emitter Voltage	$\mathit{BV}_\mathit{CEO}$	50	V
Emitter Base Voltage	$BV_{EBO}$	5	V
Collector Current (DC)	$I_C$	100	mA
Base Current (DC)	$I_B$	20	mA
Total Power Dissipation @ $T_{amb}$ = 25 °C	$P_{tot}$	500	mW
Operating Storage Junction Temperature Range	$T_{j'}T_{stg}$	-55 to +150	${\mathscr C}$

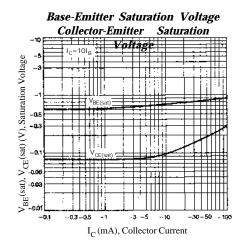
**ELECTRICAL CHARACTERISTICS** (Ta=25 °C unless otherwise specified)

Characteristic	Symbol	Min	Typ	Max	Unit
Collector Emitter Breakdown Voltage					
$I_C=1mA$ , $I_B=0$	$\mathit{BV}_\mathit{CEO}$	<i>50</i>	-	-	V
Collector Base Voltage	020				
$I_{C}=100\mu A, I_{E}=0$	$BV_{CBO}$	60	-	-	V
Emitter Base Voltage					
$I_{E}=10\mu A,\ I_{C}=0$	$\mathit{BV}_{EBO}$	5	-	-	V
Collector Cut-Off Current	220				
$V_{CB}$ =60 $V$ , $I_{E}$ =0	$I_{CBO}$	-	-	0.1	$\mu A$
Emitter Cut-Off Current					
$V_{EB}$ =5 $V$ , $I_{C}$ =0	$I_{EBO}$	-	-	0.1	$\mu A$
DC Current Gain					
$V_{CE}$ =6 $V$ , $I_{C}$ =1 $mA$	$h_{FE^*}$	90	-	600	
Collector Emitter Saturation Voltage					
$I_{C}=100mA,\ I_{B}=10mA$	$V_{CE(sat)}$	-	-	0.3	V
Base Emitter On Voltage	(				
$I_{C}=1mA$ , $V_{CE}=6V$	V <sub>BE(on)</sub>	0.6	-	0.7	V
DYNAMIC CHARACTERISTICS					
Current-Gain Bandwidth Product					
$V_{CE}$ =6 $V$ , $I_{C}$ =10 $mA$	$f_T$	100	-	-	MHz
Common Base Output Capacitance	•				
$V_{CB}$ =10V, $I_{E}$ =0, $f$ =1MHz	$C_{ob}$	-	-	6	pF
Noise Figure					
$V_{CE}$ =6V, $I_{C}$ =0.3mA	NF	-	-	20	dB
$R_S = 10k\Omega$ , $f = 100Hz$					
h <sub>FE</sub> CLASSIFICATION	R 90-180	Q 135=270	P 200-400	300-	_









### **Customer Notes**

#### **Disclaimer**

The product information and the selection guides facilitate selection of the CDIL's Discrete Semiconductor Device(s) best suited for application in your product(s) as per your requirement. It is recommended that you completely review our Data Sheet(s) so as to confirm that the Device(s) meet functionality parameters for your application. The information furnished on the CDIL Web Site/CD are believed to be accurate and reliable. CDIL however, does not assume responsibility for inaccuracies or incomplete information. Furthermore, CDIL does not assume liability whatsoever, arising out of the application or use of any CDIL product; neither does it convey any license under its patent rights nor rights of others. These products are not designed for use in life saving/support appliances or systems. CDIL customers selling these products (either as individual Discrete Semiconductor Devices or incorporated in their end products), in any life saving/support appliances or systems or applications do so at their own risk and CDIL will not be responsible for any damages resulting from such sale(s).

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