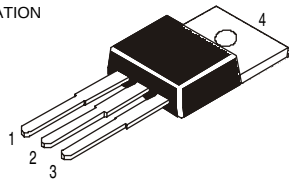
TO-220 Plastic Package **CSA968, CSA968A, CSA968B**

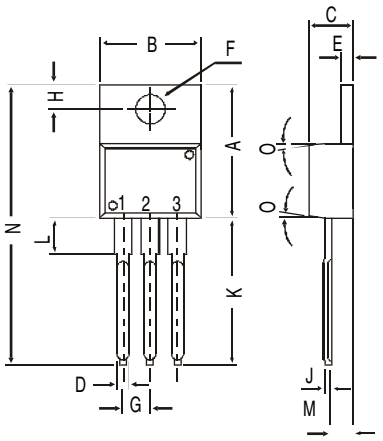
CSA968, 968A, 968B PNP PLASTIC POWER TRANSISTORS

Complementary CSC2238, 2238A, 2238B

Power Amplifier Applications and Driver Stage Amplifier Applications

PIN CONFIGURATION
1. BASE
2. COLLECTOR
3. EMITTER
4. COLLECTOR





All diminsions in mm.

DIM	MIN.	MAX.
A	14.42	16.51
B	9.63	10.67
C	3.56	4.83
D		0.90
E	1.15	1.40
F	3.75	3.88
G	2.29	2.79
H	2.54	3.43
J		0.56
K	12.70	14.73
L	2.80	4.07
M	2.03	2.92
N		31.24
O	DEG 7	

ABSOLUTE MAXIMUM RATINGS

			968	968A	968B	
Collector-base voltage (open emitter)	V_{CBO}	*max.*	160	180	200	*V*
Collector-emitter voltage (open base)	V_{CEO}	*max.*	160	180	200	*V*
Collector current	I_C	*max.*		1.5		*A*
Total power dissipation up to T_C *= 25°C*	P_{tot}	*max.*		25		*W*
Junction temperature	T_j	*max.*		150		*°C*
Collector-emitter saturation voltage						
I_C *= 500 mA;* I_B *= 50 mA*	V_{CEsat}	*max.*		1.5		*V*
D.C. current gain						
I_C *= 100 mA;* V_{CE} *= 5 V*	h_{FE}	*min*		70		
		max.		240		

RATINGS (at T_A=25°C unless otherwise specified)

Limiting values			968	968A	968B	
Collector-base voltage (open emitter)	V_{CBO}	*max.*	160	180	200	*V*
Collector-emitter voltage (open base)	V_{CEO}	*max.*	160	180	200	*V*
Emitter-base voltage (open collector)	V_{EBO}	*max.*		5.0		*V*

Collector current	I_C	*max.*	*1.5*	*A*
Emitter current	I_E	*max.*	*1.5*	*A*
Total power dissipation up to T_C *= 25°C*	P_{tot}	*max.*	*25*	*W*
Junction temperature	T_j	*max.*	*150*	*°C*
Storage temperature	T_{stg}		*–65 to +150*	*°C*

CHARACTERISTICS

T_{amb} *= 25°C unless otherwise specified*

			968	***968A***	***968B***	
Collector cutoff current						
$I_E = 0$; $V_{CB} = 160$ *V*	I_{CBO}	*max.*		*1.0*		*µA*
Emitter cut-off current						
$I_C = 0$; $V_{EB} = 5$ *V*	I_{EBO}	*max.*		*1.0*		*µA*
Breakdown voltages						
$I_C = 10$ *mA*; $I_B = 0$	V_{CEO}	*min.*	*160*	*180*	*200*	*V*
$I_C = 1$ *mA*; $I_E = 0$	V_{CBO}	*min.*	*160*	*180*	*200*	*V*
$I_E = 1$ *mA*; $I_C = 0$	V_{EBO}	*min.*		*5.0*		*V*
Saturation voltage						
$I_C = 500$ *mA*; $I_B = 50$ *mA*	V_{CEsat}	*max.*		*1.5*		*V*
Base emitter on voltage						
$I_C = 500$ *mA*; $V_{CE} = 5$ *V*	$V_{BE(on)}$	*max.*		*1.0*		*V*
D.C. current gain						
$I_C = 100$ *mA*; $V_{CE} = 5$ *V***	h_{FE}	*min.*		*70*		
		max.		*240*		
Output capacitance at f = 1 MHz						
$I_E = 0$; $V_{CB} = 10$ *V*	C_o	*typ.*		*30*		*pF*
Transition frequency						
$I_C = 100$ *mA*; $V_{CE} = 10$ *V*	f_T	*typ.*		*100*		*MHz*

***** h_{FE} classification: O: 70-140 Y: 120-240***

Customer Notes

Disclaimer

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