HORIZONTAL DEFLECTION TRANSISTOR
NPN **BU208A,** 5A 700V

Technical Data

…designed for use in televisions.

- ☞ Collector-Emitter Voltage-V_{CES}=1500Vdc
- ☞ Low Thermal Resistance 1⏀C/W increased Reliability
- ☞ TO-3 Package
- ☞ Fast Switching ---400ns Typical Fall Time

MAXIMUM RATINGS

Rating	Symbol	Value	Unit
Collector- Emitter Voltage	$V_{CEO(SUS)}$	700	Vdc
Collector- Emitter Voltage	V_{CES}	1500	Vdc
Emitter Base Voltage	V_{EB}	5	Vdc
Collector Current – Continuous _Peak(1)	I_C I_{CM}	5 7.5	Adc
Base Current – continuous -- Peak(1)	I_B IBM	4 3.5	Adc
Total Power Dissipation @ TC = 95°C Derate above 95°C	PD	12.5 0.625	Watts W/°C
Operating and Storage junction Temperature Range	Tj,Tstg	-65 to +115	°C

THERMAL CHARACTERISTICS

Characteristic	Symbol	Max.	Unit
Thermal resistance junction to case	R_{thjc}	1.6	°C/W

ISO 14001 CERTIFIED
AN ISO 9002 COMPANY

ELECTRICAL CHARACTERISTICS :[Tc = 25 °C unless otherwise noted]

Characteristic	Symbol	Min	Typ	Max	Unit
*** OFF CHARACTERISTICS :**					
Collector–Emitter Sustaining Voltage (1) [Ic =100 mAdc, I_B = 0]	$V_{CEO(sus)}$	700			Vdc
Collector Cutoff Current [V_{CE} = 1500 Vdc, V_{BE} = 0]	I_{CES}			1	mAdc
Emitter Base Voltage [I_E = 10mA, Ic = 0]	BV_{EBO}	5			Vdc
*** ON CHARACTERISTICS (1):**					
DC Current Gain [Ic = 4.5 Adc , V_{CE} = 5.0 Vdc]	h_{FE}	2.25			
Collector-Emitter Saturation Voltage [Ic = 4.5 Adc , I_B = 2Adc)	$V_{CE(sat)}$			1	Vdc
Base-Emitter Saturation Voltage [Ic = 4.5 Adc , I_B = 2Adc]	$V_{BE(sat)}$			1.5	Vdc
DYNAMIC CHARACTERISTICS:					
Current Gain – Bandwidth Product [Ic = 0.1Adc,V_{CE}=5 Vdc, ftest=1.0 MHz]	f_T	---	4	--	MHz
Output Capacitance (VCB=10Vdc,IE=0,f=1MHz)	C_{OB}	--	125	--	pF
SWITCHING CHARACTERISTICS					
Fall Time (I_C=2Adc,I_{B1}=1Adc,L_B=25✪H)	tf	---	0.4	---	✪s
Storage Time (I_C=4.5Adc,I_{B1}=1.8Adc,L_B=10✪H	ts		8		✪s

(1) Pulse Test : Pulse Width =300✪s , Duty Cycle < 2.0%