EVVOSEMI®
THINK CHANGE DO

ESD TVS MOS LDO Diode Sensor DC-DC

Product Specification

Domestic Part Number	BU508D
Overseas Part Number	BU508D
Equivalent Part Number	BU508D

HORIZONTAL DEFLECTION TRANSISTOR
NPN BU508D 8A 1500V

Technical Data

…designed for use in large screen color deflection circuits.

- ☞ Collector-Emitter Voltage-VCES=1500Vdc
- ☞ Low Thermal Resistance 1①C/W increased Reliability
- ☞ TO-3PN Package for Low Cost Mounting
- ☞ Switching Times with Inductive Loads,
  Tf=0.5us(Typ)@IC=4.5A

MAXIMUM RATINGS

Rating	Symbol	Value	Unit
Collector- Emitter Voltage	V_{CEO}	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}	8 15	Adc
Base Current – continuous -- Peak(1)	I_B IBM	4 6	Adc
Total Power Dissipation @ TC = 25°C Derate above 25°C	PD	125 1	Watts W/°C
Operating and Storage junction Temperature Range	Tj,Tstg	-65 to +150	°C

THERMAL CHARACTERISTICS

Characteristic	Symbol	Max.	Unit
Thermal resistance junction to case	R_{thjc}	1.0	°C/W

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}			0.1	mAdc
Emitter Base Leakage [V_{EB} = 6V, Ic = 0]	I_{EBO}			300	mAdc
*** On Characteristics (1):**					
DC Current Gain [Ic = 2.0 Adc , V_{CE} = 4.0 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]	$V_{BE(sat)}$			1.3	Vdc
Dynamic Characteristics :					
Current Gain – Bandwidth Product [Ic = 0.1Adc,V_{CE}=5 Vdc, ftest=1.0 MHz]	f_T	---	7	--	MHz
Output Capacitance (VCB=10Vdc,IE=0,f=0.1MHz)	C_{OB}	--	125	--	pF
SWITCHING CHARACTERISTICS					
Fall Time (I_C=4.5Adc,I_{B1}=1.8Adc,L_B=10✪H)	tf	---	0.5	---	✪s
	ts		8		✪s

(1) Pulse Test : Pulse Width =5mS , Duty Cycle < 10.0%

Disclaimer

EVVOSEMI ("EVVO") reserves the right to make corrections, enhancements, improvements, and other changes to its products and services at any time, and to discontinue any product or service without notice.

EVVO warrants the performance of its hardware products to the specifications applicable at the time of sale in accordance with its standard warranty. Testing and other quality control techniques are used as deemed necessary by EVVO to support this warranty. Except where mandated by government requirements, testing of all parameters of each product is not necessarily performed.

Customers should obtain and confirm the latest product information and specifications before final design, purchase, or use. EVVO makes no warranty, representation, or guarantee regarding the suitability of its products for any particular purpose, nor does EVVO assume any liability for application assistance or customer product design. EVVO does not warrant or accept any liability for products that are purchased or used for any unintended or unauthorized application.

EVVO products are not authorized for use as critical components in life support devices or systems without the express written approval of EVVOSEMI.

The EVVO logo and EVVOSEMI are trademarks of EVVOSEMI or its subsidiaries in relevant jurisdictions. EVVO reserves the right to make changes without further notice to any products herein.