

# EVVOSEMI<sup>®</sup>

THINK CHANGE DO



ESD



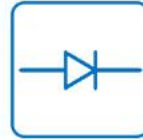
TVS



MOS



LDO



Diode



Sensor



DC-DC

## Product Specification

▶ Domestic	Part Number	MJ21193
▶ Overseas	Part Number	MJ21193
▶ Equivalent	Part Number	MJ21193

EV is the abbreviation of name EVVO

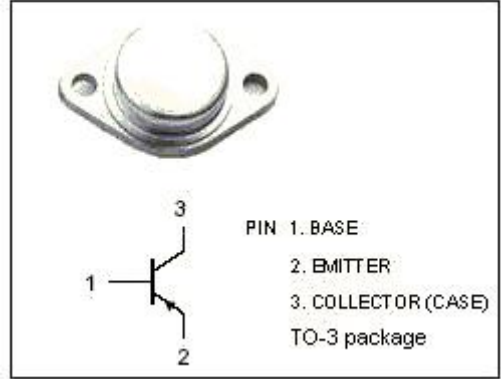
## Silicon PNP Power Transistor

### DESCRIPTION

- Excellent Safe Operating Area
- DC Current Gain-  
:  $h_{FE} = 25-75 @ I_C = -8A, V_{CE} = -5V$
- Collector-Emitter Saturation Voltage-  
:  $V_{CE(sat)} = -1.4 V(Max) @ I_C = -8A$
- Complement to the NPN MJ21194

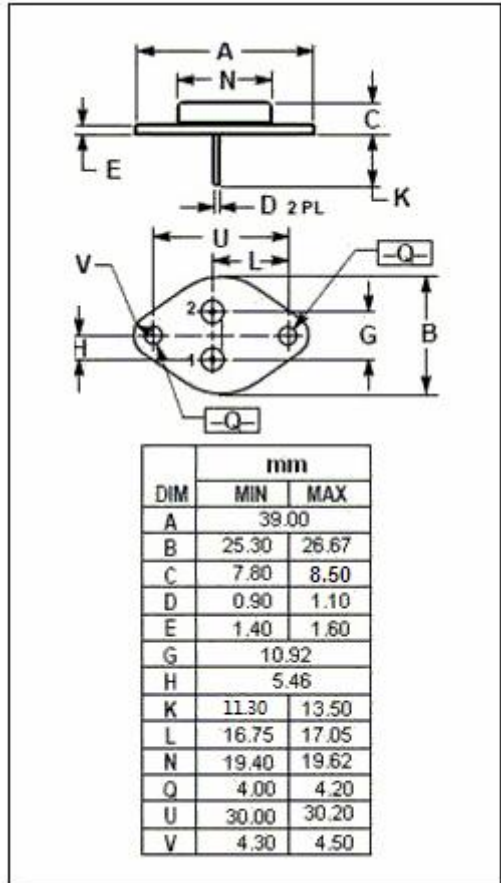
### APPLICATIONS

- Designed for high power audio output, disk head positioners and other linear applications.



### ABSOLUTE MAXIMUM RATINGS ( $T_a = 25^\circ C$ )

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	-400	V
$V_{CEO}$	Collector-Emitter Voltage	-250	V
$V_{EBO}$	Emitter-Base Voltage	-5	V
$I_C$	Collector Current-Continuous	-16	A
$I_B$	Base Current	-5	A
$P_D$	Total Power Dissipation @ $T_C = 25^\circ C$	250	W
$T_j$	Junction Temperature	200	$^\circ C$
$T_{stg}$	Storage Temperature	-65~200	$^\circ C$



### THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	0.7	$^\circ C/W$

**ELECTRICAL CHARACTERISTICS**
**T<sub>j</sub>=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V <sub>CEO(SUS)</sub>	Collector-Emitter Sustaining Voltage	I <sub>C</sub> = -50mA ; I <sub>B</sub> = 0	-250		V
V <sub>CE(sat)-1</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = -8A; I <sub>B</sub> = -0.8A		-1.4	V
V <sub>CE(sat)-2</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = -16A; I <sub>B</sub> = -3.2A		-4.0	V
V <sub>BE(on)</sub>	Base-Emitter On Voltage	I <sub>C</sub> =8A ; V <sub>CE</sub> = 5V		-2.2	V
I <sub>CEO</sub>	Collector Cutoff Current	V <sub>CE</sub> = -200V; V <sub>BE(off)</sub> = 0		-0.1	mA
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = -5V; I <sub>C</sub> = 0		-0.1	mA
h <sub>FE-2</sub>	DC Current Gain	I <sub>C</sub> = -8A ; V <sub>CE</sub> = -5V	25	75	
h <sub>FE-3</sub>	DC Current Gain	I <sub>C</sub> = -16A ; V <sub>CE</sub> = -5V	8		
I <sub>s/b</sub>	Second Breakdown Collector Current with Base Forward Biased	V <sub>CE</sub> = -50Vdc, t= 1 s, Nonrepetitive	-5		A
C <sub>OB</sub>	Output Capacitance	I <sub>E</sub> = 0 ; V <sub>CB</sub> = -10V; f <sub>test</sub> = -1.0MHz	300		pF
f <sub>T</sub>	Current-Gain—Bandwidth Product	I <sub>C</sub> = -1A ; V <sub>CE</sub> = -10V; f <sub>test</sub> = -1.0MHz	4		MHz

## 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.