

# Central<sup>TM</sup> Semiconductor Corp.

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Manufacturers of World Class Discrete Semiconductors

2N491  
2N491A  
2N491B

SILICON UNIJUNCTION TRANSISTOR

JEDEC TO-5 CASE\*\*

DESCRIPTION

The CENTRAL SEMICONDUCTOR 2N491 series is a PN type Silicon Unijunction Transistor designed for general purpose industrial applications.

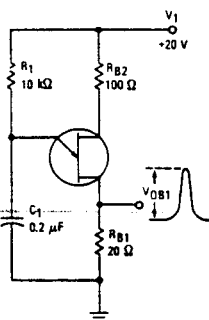
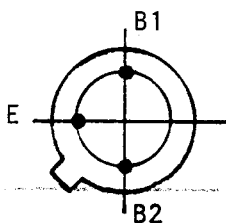
MAXIMUM RATINGS (T<sub>A</sub>=25°C)

	SYMBOL	2N491	2N491A	2N491B	UNIT
RMS Power Dissipation	P <sub>D</sub> (RMS)	600	600	600	mW
RMS Emitter Current	I <sub>E</sub> (RMS)	70	70	70	mA
Peak Emitter Current (T <sub>J</sub> =150°C)	I <sub>E</sub>	2.0	2.0	2.0	A
Emitter Reverse Voltage (T <sub>J</sub> =150°C)	V <sub>B2E</sub>	60	60	60	V
Operating and Storage, Junction Temperature	T <sub>J</sub> , T <sub>stg</sub>	-65 TO + 175			°C

ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C)

SYMBOL	TEST CONDITIONS	MIN	MAX	UNIT
n	V <sub>BB</sub> =10V	0.56	0.68	-
R <sub>BB0</sub>	V <sub>BB</sub> =3V	4.7	6.8	-
I <sub>B2</sub> (MOD)	V <sub>BB</sub> =10V, I <sub>E</sub> =50mA	6.8	22	mA
V <sub>E</sub> (SAT)	V <sub>BB</sub> =10V, I <sub>E</sub> =50mA (2N491)	-	5.0	V
V <sub>E</sub> (SAT)	V <sub>BB</sub> =10V, I <sub>E</sub> =50mA (2N491A, 2N491B)	-	4.3	V
I <sub>EB20</sub>	V <sub>B2E</sub> =60V	-	2.0	uA
I <sub>EB20</sub>	V <sub>B2E</sub> =10V, T <sub>J</sub> =150°C	-	20	uA
I <sub>EB20</sub>	V <sub>B2E</sub> =30V (2N491B)	-	0.2	uA
I <sub>P</sub>	V <sub>BB</sub> =25V (2N491, 2N491A)	-	12	uA
I <sub>P</sub>	V <sub>BB</sub> =25V (2N491B)	-	6.0	uA
I <sub>V</sub>	V <sub>BB</sub> =20V, R <sub>B2</sub> =100 OHMS	8.0	-	mA
V <sub>OB1</sub>	V <sub>1</sub> =20V, (2N491A, 2N491B)	3.0	-	V

\*CONFORMS TO JEDEC TO-5 OUTLINE EXCEPT FOR LEAD CONFIGURATION. V<sub>OB1</sub> TEST CIRCUIT



η TEST CIRCUIT

