

Central™

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.

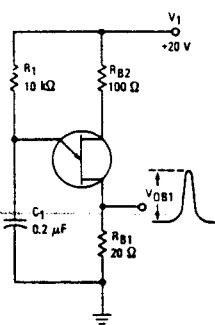
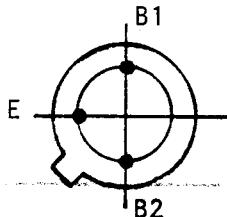
MAXIMUM RATINGS ($T_A=25^\circ\text{C}$)

	SYMBOL	2N491	2N491A	2N491B	UNIT
RMS Power Dissipation	$P_D(\text{RMS})$	600	600	600	mW
RMS Emitter Current	$I_E(\text{RMS})$	70	70	70	mA
Peak Emitter Current ($T_J=150^\circ\text{C}$)	I_E	2.0	2.0	2.0	A
Emitter Reverse Voltage ($T_J=150^\circ\text{C}$)	V_{B2E}	60	60	60	V
Operating and Storage, Junction Temperature	T_J, T_{stg}		-65 TO + 175		$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$)

SYMBOL	TEST CONDITIONS	MIN	MAX	UNIT
n	$V_{BB}=10\text{V}$	0.56	0.68	-
R_{BBO}	$V_{BB}=3\text{V}$	4.7	6.8	-
$ I_{B2}(\text{MOD})$	$V_{BB}=10\text{V}, I_E=50\text{mA}$	6.8	22	mA
$V_E(\text{SAT})$	$V_{BB}=10\text{V}, I_E=50\text{mA}$ (2N491)	-	5.0	V
$V_E(\text{SAT})$	$V_{BB}=10\text{V}, I_E=50\text{mA}$ (2N491A, 2N491B)	-	4.3	V
$ I_{EB20}$	$V_{B2E}=60\text{V}$	-	2.0	uA
$ I_{EB20}$	$V_{B2E}=10\text{V}, T_J=150^\circ\text{C}$	-	20	uA
$ I_{EB20}$	$V_{B2E}=30\text{V}$ (2N491B)	-	0.2	uA
$ I_P$	$V_{BB}=25\text{V}$ (2N491, 2N491A)	-	12	uA
$ I_P$	$V_{BB}=25\text{V}$ (2N491B)	-	6.0	uA
$ I_V$	$V_{BB}=20\text{V}, R_{B2}=100 \text{ OHMS}$	8.0	-	mA
V_{OB1}	$V_1=20\text{V}$, (2N491A, 2N491B)	3.0		V

*CONFORMS TO JEDEC TO-5 OUTLINE V_{OB1} TEST CIRCUIT
EXCEPT FOR LEAD CONFIGURATION.



η TEST CIRCUIT

