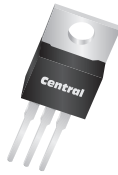


2N6486 2N6487 2N6488 NPN  
2N6489 2N6490 2N6491 PNP

**COMPLEMENTARY SILICON  
POWER TRANSISTORS**



**TO-220 CASE**



[www.centralemi.com](http://www.centralemi.com)

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR 2N6486, 2N6489 series types are complementary silicon power transistors designed for general purpose switching and amplifier applications.

**MARKING: FULL PART NUMBER**

**MAXIMUM RATINGS:** ( $T_C=25^\circ\text{C}$  unless otherwise noted)

	SYMBOL	2N6486 2N6489	2N6487 2N6490	2N6488 2N6491	UNITS
Collector-Base Voltage	$V_{CBO}$	50	70	90	V
Collector-Emitter Voltage	$V_{CEO}$	40	60	80	V
Emitter-Base Voltage	$V_{EBO}$		5.0		V
Continuous Collector Current	$I_C$		15		A
Continuous Base Current	$I_B$		5.0		A
Power Dissipation	$P_D$		75		W
Power Dissipation ( $T_A=25^\circ\text{C}$ )	$P_D$		1.8		W
Operating and Storage Junction Temperature	$T_J, T_{stg}$		-65 to +150		$^\circ\text{C}$
Thermal Resistance	$\theta_{JC}$		1.67		$^\circ\text{C/W}$

**ELECTRICAL CHARACTERISTICS:** ( $T_C=25^\circ\text{C}$ )

SYMBOL	TEST CONDITIONS	2N6486 2N6489		2N6487 2N6490		2N6488 2N6491		UNITS
		MIN	MAX	MIN	MAX	MIN	MAX	
$I_{CEV}$	$V_{CE}=45V, V_{EB}=1.5V$	-	500	-	-	-	-	$\mu\text{A}$
$I_{CEV}$	$V_{CE}=65V, V_{EB}=1.5V$	-	-	-	500	-	-	$\mu\text{A}$
$I_{CEV}$	$V_{CE}=85V, V_{EB}=1.5V$	-	-	-	-	-	500	$\mu\text{A}$
$I_{CEO}$	$V_{CE}=\frac{1}{2}$ Rated $V_{CEO}$	-	1.0	-	1.0	-	1.0	mA
$I_{EBO}$	$V_{EB}=5.0V$	-	1.0	-	1.0	-	1.0	mA
$BV_{CEV}$	$V_{BE}=1.5V, I_C=200\text{mA}$	50	-	70	-	90	-	V
$BV_{CEO}$	$I_C=200\text{mA}$	40	-	60	-	80	-	V
$V_{CE(SAT)}$	$I_C=5.0A, I_B=0.5A$	-	1.3	-	1.3	-	1.3	V
$V_{CE(SAT)}$	$I_C=15A, I_B=5.0A$	-	3.5	-	3.5	-	3.5	V
$V_{BE(ON)}$	$V_{CE}=4.0V, I_C=5.0A$	-	1.3	-	1.3	-	1.3	V
$V_{BE(ON)}$	$V_{CE}=4.0V, I_C=15A$	-	3.5	-	3.5	-	3.5	V
$h_{FE}$	$V_{CE}=4.0V, I_C=5.0A$	20	150	20	150	20	150	
$h_{FE}$	$V_{CE}=4.0V, I_C=15A$	5.0	-	5.0	-	5.0	-	
$h_{fe}$	$V_{CE}=4.0V, I_C=1.0A, f=1.0\text{kHz}$	25	-	25	-	25	-	
$f_T$	$V_{CE}=4.0V, I_C=1.0A, f=1.0\text{MHz}$	5.0	-	5.0	-	5.0	-	MHz

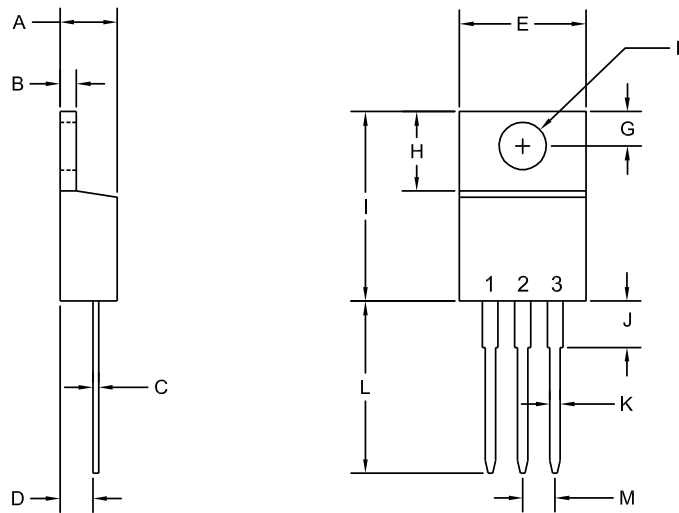
R1 (11-September 2012)

2N6486 2N6487 2N6488 NPN  
 2N6489 2N6490 2N6491 PNP



**COMPLEMENTARY SILICON  
 POWER TRANSISTORS**

**TO-220 CASE - MECHANICAL OUTLINE**



R2

**LEAD CODE:**

- 1) Base
- 2) Collector
- 3) Emitter
- Tab) Collector

**MARKING:  
 FULL PART NUMBER**

SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.170	0.190	4.31	4.82
B	0.045	0.055	1.15	1.39
C	0.013	0.026	0.33	0.65
D	0.083	0.107	2.10	2.72
E	0.394	0.417	10.01	10.60
F (DIA)	0.140	0.157	3.55	4.00
G	0.100	0.118	2.54	3.00
H	0.230	0.270	5.85	6.85
I	0.560	0.625	14.23	15.87
J	-	0.250	-	6.35
K	0.025	0.038	0.64	0.96
L	0.500	0.579	12.70	14.70
M	0.090	0.110	2.29	2.79

TO-220 (REV: R2)

R1 (11-September 2012)



## OUTSTANDING SUPPORT AND SUPERIOR SERVICES

---

### PRODUCT SUPPORT

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- Inventory bonding
- Consolidated shipping options
- Custom bar coding for shipments
- Custom product packing

---

### DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free quick ship samples (2<sup>nd</sup> day air)
- Online technical data and parametric search
- SPICE models
- Custom electrical curves
- Environmental regulation compliance
- Customer specific screening
- Up-screening capabilities
- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- Application and design sample kits
- Custom product and package development

---

### REQUESTING PRODUCT PLATING

1. If requesting Tin/Lead plated devices, add the suffix "TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
2. If requesting Lead (Pb) Free plated devices, add the suffix "PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

---

### CONTACT US

#### Corporate Headquarters & Customer Support Team

Central Semiconductor Corp.  
145 Adams Avenue  
Hauppauge, NY 11788 USA  
Main Tel: (631) 435-1110  
Main Fax: (631) 435-1824  
Support Team Fax: (631) 435-3388  
[www.centrasemi.com](http://www.centrasemi.com)

**Worldwide Field Representatives:**  
[www.centrasemi.com/wwreps](http://www.centrasemi.com/wwreps)

**Worldwide Distributors:**  
[www.centrasemi.com/wwdistributors](http://www.centrasemi.com/wwdistributors)

---

For the latest version of Central Semiconductor's **LIMITATIONS AND DAMAGES DISCLAIMER**, which is part of Central's Standard Terms and Conditions of sale, visit: [www.centrasemi.com/terms](http://www.centrasemi.com/terms)

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Bipolar Transistors - BJT category](#):*

*Click to view products by [Central Semiconductor manufacturer](#):*

Other Similar products are found below :

[619691C](#) [MCH4017-TL-H](#) [MJ15024/WS](#) [MJ15025/WS](#) [BC546/116](#) [BC556/FSC](#) [BC557/116](#) [BSW67A](#) [HN7G01FU-A\(T5L,F,T](#)  
[NJVMJD148T4G](#) [NSVMMBT6520LT1G](#) [NTE187A](#) [NTE195A](#) [NTE2302](#) [NTE2330](#) [NTE2353](#) [NTE316](#) [IMX9T110](#) [NTE63](#) [NTE65](#)  
[C4460](#) [SBC846BLT3G](#) [2SA1419T-TD-H](#) [2SA1721-O\(TE85L,F\)](#) [2SA1727TLP](#) [2SA2126-E](#) [2SB1202T-TL-E](#) [2SB1204S-TL-E](#) [2SC5488A-](#)  
[TL-H](#) [2SD2150T100R](#) [SP000011176](#) [FMC5AT148](#) [2N2369ADCSM](#) [2SB1202S-TL-E](#) [2SC2412KT146S](#) [2SC4618TLN](#) [2SC5490A-TL-H](#)  
[2SD1816S-TL-E](#) [2SD1816T-TL-E](#) [CMXT2207 TR](#) [CPH6501-TL-E](#) [MCH4021-TL-E](#) [BC557B](#) [TTC012\(Q\)](#) [BULD128DT4](#) [JANTX2N3810](#)  
[Jantx2N5416](#) [US6T6TR](#) [KSF350](#) [068071B](#)