

CentralTM Semiconductor Corp.

145 Adams Avenue, Hauppauge, NY 11788 USA
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Manufacturers of World Class Discrete Semiconductors

2N6477

2N6478

NPN SILICON
POWER TRANSISTOR

JEDEC TO-220 CASE

DESCRIPTION

The CENTRAL SEMICONDUCTOR 2N6477 and 2N6478 types are Epitaxial-Base Silicon Power Transistors designed high voltage amplifier applications.

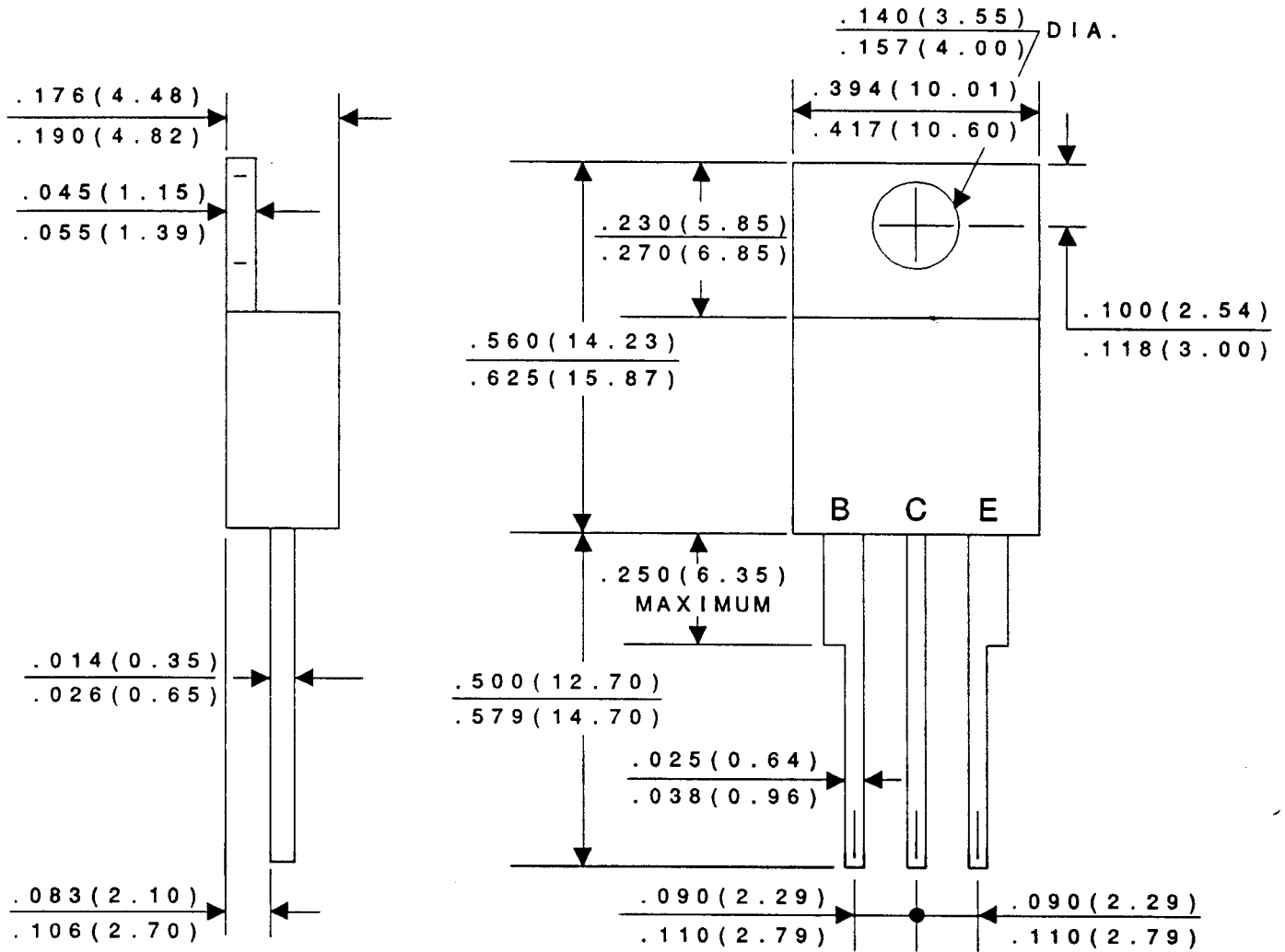
MAXIMUM RATINGS (T_C = 25°C)

	SYMBOL	2N6477	2N6478	UNITS
Collector-Base Voltage	V _{CB0}	140	160	V
Collector-Emitter Voltage	V _{CEV}	140	160	V
Collector-Emitter Voltage	V _{CEO}	130	150	V
Collector-Emitter Voltage	V _{CER}	120	140	V
Emitter-Base Voltage	V _{EBO}	5.0		V
Collector Current	I _C	2.5		A
Peak Collector Current	I _{CM}	4.0		A
Base Current	I _B	1.0		A
Power Dissipation	P _D	50		W
Operating and Storage				
Junction Temperature	T _J , T _{stg}	-65 to +150		°C
Thermal Resistance	θ _{JC}	2.5		°C/W

ELECTRICAL CHARACTERISTICS (T_C = 25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	2N6477		2N6478		UNITS
		MIN	MAX	MIN	MAX	
I _{CEV}	V _{CE} = 130V, V _{BE(off)} = 1.5V		2.0			mA
I _{CEV}	V _{CE} = 150V, V _{BE(off)} = 1.5V			2.0		mA
I _{CEV}	V _{CE} = 120V, V _{BE(off)} = 1.5V, T _C = 150°C		10			mA
I _{CEV}	V _{CE} = 140V, V _{BE(off)} = 1.5V, T _C = 150°C			10		mA
I _{CEO}	V _{CE} = 80V		2.0			mA
I _{CEO}	V _{CE} = 100V			2.0		mA
I _{EBO}	V _{BE} = 5.0V		2.0	2.0		mA
BV _{CEV}	I _C = 100mA, V _{BE} = 1.5V	140		160		V
BV _{CER}	I _C = 100mA, R _{BE} = 100Ω	130		150		V
BV _{CEO}	I _C = 100mA	120		140		V
V _{CE(SAT)}	I _C = 1.0A, I _B = 100mA		1.0		1.0	V
V _{CE(SAT)}	I _C = 2.5A, I _B = 500mA		2.0		2.0	V
V _{BE(ON)}	V _{CE} = 4.0V, I _C = 1.0A		1.8		1.8	V
V _{BE(ON)}	V _{CE} = 4.0V, I _C = 2.5A		3.0		3.0	V
h _{FE}	V _{CE} = 4.0V, I _C = 1.0A	25	150	25	150	
h _{FE}	V _{CE} = 4.0V, I _C = 2.5A	5.0		5.0		
h _{fe}	V _{CE} = 4.0V, I _C = 500mA, f = 40kHz	5.0		5.0		
f _T	V _{CE} = 4.0V, I _C = 500mA	200		200		kHz
h _{fe}	V _{CE} = 4.0V, I _C = 100mA, f = 1.0kHz	25		25		

JEDEC TO-220 CASE - MECHANICAL OUTLINE



All Dimensions in Inches (mm).

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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 (2nd 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

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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

Product End of Life Notification

PDN ID:	PDN01193
Notification Date:	10/20/21
Last Buy Date:	4/20/22
Last Shipment Date	10/20/22

Summary: The following power transistors are discontinued and now classified as of End of Life (EOL).

Although Central Semiconductor Corp. makes every effort to continue to produce devices that have been proclaimed EOL (End of Life) by other manufacturers, it is an accepted industry practice to discontinue certain devices when customer demand falls below a minimum level of sustainability. Accordingly, the following product(s) have been transitioned to End of Life status as part of Central's ongoing Product Management Process. Any replacement products are noted below. The effective date for placing last purchase orders will be six (6) months from the date of this notice and twelve (12) months from the notice date for final shipments, and minimum order quantities may apply. The last purchase and shipment dates may be extended if inventory is available.

*** All Plating types (PBFREE,TIN/LEAD) for each item listed are included in this notice.**

<u>Central Part Number</u>	<u>Suggested Replacement</u>
2N6474	N/A
2N6478 SL	N/A

Central would be happy to assist you by providing additional information or technical data to help locate an alternate source if we have no replacement available. If you would like assistance, please visit <https://my.centrasemi.com/submit-inquiry?type=ER> to submit an online inquiry.

DISCLAIMER: This End of Life (EOL) notification is in accordance with JEDEC standard JESD48 - Product Discontinuance. Central Semiconductor Corp. will make every effort to offer life-time buy (LTB) opportunities and/or offer replacement devices to existing customers for discontinued devices, however, one or both may not be possible for all devices. Please contact your local Central Semiconductor sales representative for LTB opportunities/additional information.