## 2N6473 2N6474 NPN 2N6475 2N6476 PNP

# COMPLEMENTARY SILICON SWITCHING TRANSISTORS



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# **DESCRIPTION:**

The CENTRAL SEMICONDUCTOR 2N6473, 2N6475 series types are complementary silicon power transistors, manufactured by the epitaxial base process, designed for general purpose amplifier and switching applications.

2N6474

## **MARKING: FULL PART NUMBER**



1				
MAXIMUM RATINGS: (T <sub>C</sub> =25°C)	SYMBOL	2N6473 2N6475	2N6474 2N6476	UNITS
Collector-Base Voltage	$V_{CBO}$	110	130	V
Collector-Emitter Voltage (R <sub>BE</sub> =100Ω)	$V_{CER}$	110	130	V
Collector-Emitter Voltage	$V_{CEO}$	100	120	V
Emitter-Base Voltage	$V_{EBO}$	5.	0	V
Continuous Collector Current	IC	4.	0	Α
Continuous Base Current	$I_{B}$	2.	0	Α
Power Dissipation	$P_{D}$	4	0	W
Operating and Storage Junction Temperature	T <sub>J</sub> , T <sub>stg</sub>	-65 to	+150	°C
Thermal Resistance	$\Theta$ JC	3.1	25	°C/W

# 

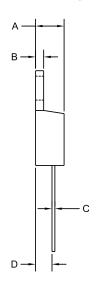
			2N6473 2N6475		6474 6476	
SYMBOL	TEST CONDITIONS	MIN	MAX	MIN	MAX	UNITS
<b>ICEV</b>	$V_{CE}$ =Rated $V_{CEO}$ , $V_{BE}$ =1.5V	-	100	-	100	μΑ
<b>ICEV</b>	V <sub>CE</sub> =Rated V <sub>CEO</sub> , V <sub>BE</sub> =1.5V, T <sub>C</sub> =100°C	-	2.0	-	2.0	mA
I <sub>CER</sub>	$V_{CE}$ =Rated $V_{CER}$ , $R_{BE}$ =100 $\Omega$	-	100	-	100	μΑ
I <sub>CER</sub>	$V_{CE}$ =Rated $V_{CER}$ , $R_{BE}$ =100 $\Omega$ , $T_{C}$ =100 $^{\circ}$ C	-	2.0	-	2.0	mA
I <sub>CEO</sub>	V <sub>CE</sub> =1/2 Rated V <sub>CEO</sub>	-	1.0	-	1.0	mA
I <sub>EBO</sub>	V <sub>EB</sub> =5.0V	-	1.0	-	1.0	mA
<b>BV</b> CEO	I <sub>C</sub> =100mA	100	-	120	-	V
	$I_C$ =100mA, $R_{BE}$ =100 $\Omega$	110	-	130	-	V
V <sub>CE(SAT)</sub>	I <sub>C</sub> =1.5A, I <sub>B</sub> =0.15A	-	1.2	-	1.2	V
V <sub>CE</sub> (SAT)	I <sub>C</sub> =4.0A, I <sub>B</sub> =2.0A	-	2.5	-	2.5	V
	V <sub>CE</sub> =4.0V, I <sub>C</sub> =1.5A	-	2.0	-	2.0	V
	V <sub>CE</sub> =2.5V, I <sub>C</sub> =4.0A	-	3.5	-	3.5	V
h <sub>FE</sub> ` ′	V <sub>CE</sub> =4.0V, I <sub>C</sub> =1.5A	15	150	15	150	
h <sub>FE</sub>	V <sub>CE</sub> =2.5V, I <sub>C</sub> =4.0A	2.0	-	2.0	-	
h <sub>fe</sub>	$V_{CE}$ =4.0V, $I_{C}$ =0.5A, f=50kHz	20	-	20	-	
$f_{T}$	V <sub>CE</sub> =4.0V, I <sub>C</sub> =0.5A (2N6473, 2N6474)	4.0	-	4.0	-	MHz
$f_{T}$	V <sub>CE</sub> =4.0V, I <sub>C</sub> =0.5A (2N6475, 2N6476)	5.0	-	5.0	-	MHz
$C_{ob}$	V <sub>CB</sub> =10V, f=1.0MHz	-	250	-	250	pF
						R1 (1-May 2013)

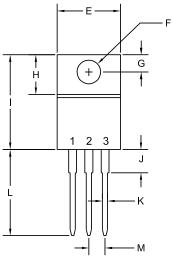
## 2N6473 2N6474 NPN 2N6475 2N6476 PNP

# COMPLEMENTARY SILICON SWITCHING TRANSISTORS



## **TO-220 CASE - MECHANICAL OUTLINE**





R2

## LEAD CODE:

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

## MARKING:

**FULL PART NUMBER** 

DIMENSIONS				
	INCHES		MILLIMETERS	
SYMBOL	MIN	MAX	MIN	MAX
Α	0.170	0.190	4.31	4.82
В	0.045	0.055	1.15	1.39
С	0.013	0.026	0.33	0.65
D	0.083	0.107	2.10	2.72
Е	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
Н	0.230	0.270	5.85	6.85
	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
М	0.090	0.110	2.29	2.79

TO-220 (REV: R2)

#### **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 guick 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**

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# Product End of Life Notification

DDM ID	
PUN ID:	PDN01193
Notification Date:	10/20/21
Last Buy Date:	
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.

Central Part Number	Suggested Replacement
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.centralsemi.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.

CCC785 REV 002