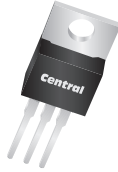


2N6473 2N6474 NPN  
2N6475 2N6476 PNP

**COMPLEMENTARY  
SILICON SWITCHING TRANSISTORS**



**TO-220 CASE**



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

**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.

**MARKING: FULL PART NUMBER**

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

Collector-Base Voltage  
Collector-Emitter Voltage ( $R_{BE}=100\Omega$ )  
Collector-Emitter Voltage  
Emitter-Base Voltage  
Continuous Collector Current  
Continuous Base Current  
Power Dissipation  
Operating and Storage Junction Temperature  
Thermal Resistance

SYMBOL	2N6473	2N6474	UNITS
	2N6475	2N6476	
$V_{CBO}$	110	130	V
$V_{CER}$	110	130	V
$V_{CEO}$	100	120	V
$V_{EBO}$		5.0	V
$I_C$		4.0	A
$I_B$		2.0	A
$P_D$		40	W
$T_J, T_{stg}$		-65 to +150	$^\circ\text{C}$
$\theta_{JC}$		3.125	$^\circ\text{C/W}$

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

SYMBOL	TEST CONDITIONS	2N6473		2N6474		UNITS
		2N6475	2N6476	2N6475	2N6476	
$I_{CEV}$	$V_{CE}=\text{Rated } V_{CEO}, V_{BE}=1.5\text{V}$	-	100	-	100	$\mu\text{A}$
$I_{CEV}$	$V_{CE}=\text{Rated } V_{CEO}, V_{BE}=1.5\text{V}, T_C=100^\circ\text{C}$	-	2.0	-	2.0	mA
$I_{CER}$	$V_{CE}=\text{Rated } V_{CER}, R_{BE}=100\Omega$	-	100	-	100	$\mu\text{A}$
$I_{CER}$	$V_{CE}=\text{Rated } V_{CER}, R_{BE}=100\Omega, T_C=100^\circ\text{C}$	-	2.0	-	2.0	mA
$I_{CEO}$	$V_{CE}=1/2 \text{ Rated } V_{CEO}$	-	1.0	-	1.0	mA
$I_{EBO}$	$V_{EB}=5.0\text{V}$	-	1.0	-	1.0	mA
$BV_{CEO}$	$I_C=100\text{mA}$	100	-	120	-	V
$BV_{CER}$	$I_C=100\text{mA}, R_{BE}=100\Omega$	110	-	130	-	V
$V_{CE(SAT)}$	$I_C=1.5\text{A}, I_B=0.15\text{A}$	-	1.2	-	1.2	V
$V_{CE(SAT)}$	$I_C=4.0\text{A}, I_B=2.0\text{A}$	-	2.5	-	2.5	V
$V_{BE(ON)}$	$V_{CE}=4.0\text{V}, I_C=1.5\text{A}$	-	2.0	-	2.0	V
$V_{BE(ON)}$	$V_{CE}=2.5\text{V}, I_C=4.0\text{A}$	-	3.5	-	3.5	V
$h_{FE}$	$V_{CE}=4.0\text{V}, I_C=1.5\text{A}$	15	150	15	150	
$h_{FE}$	$V_{CE}=2.5\text{V}, I_C=4.0\text{A}$	2.0	-	2.0	-	
$h_{fe}$	$V_{CE}=4.0\text{V}, I_C=0.5\text{A}, f=50\text{kHz}$	20	-	20	-	
$f_T$	$V_{CE}=4.0\text{V}, I_C=0.5\text{A}$ (2N6473, 2N6474)	4.0	-	4.0	-	MHz
$f_T$	$V_{CE}=4.0\text{V}, I_C=0.5\text{A}$ (2N6475, 2N6476)	5.0	-	5.0	-	MHz
$C_{ob}$	$V_{CB}=10\text{V}, f=1.0\text{MHz}$	-	250	-	250	pF

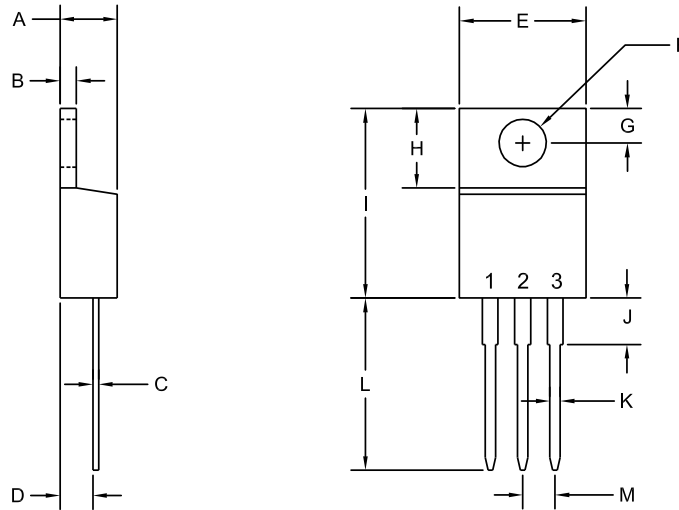
R1 (1-May 2013)

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**

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 (1-May 2013)

## OUTSTANDING SUPPORT AND SUPERIOR SERVICES



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### 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

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### 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

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### 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).

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### 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)

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