

**Central**<sup>™</sup> Semiconductor Corp.

#### DESCRIPTION:

The CENTRAL SEMICONDUCTOR 2N6071, A, B series types are silicon sensitive gate triacs designed for such applications as light dimmers, motor controls, heating controls and power supplies.

#### MARKING CODE: FULL PART NUMBER

MAXIMUM RATINGS: (T\_I=25°C unless otherwise noted) 2N6071 2N6073 2N6075 2N6071A 2N6073A 2N6075A SYMBOL 2N6075B <u>UNITS</u> 2N6071B 2N6073B Peak Repetitive Off-State Voltage 600 200 400 V V<sub>DRM</sub>, V<sub>RRM</sub> RMS On-State Current (T<sub>C</sub>=85°C) 4.0 А IT(RMS) Peak One Cycle Surge (60Hz, T<sub>.1</sub>=110°C) 30 А ITSM I<sup>2</sup>t Value for Fusing (t=8.3ms) l<sup>2</sup>t 3.7 A<sup>2</sup>s Peak Gate Power (T<sub>C</sub>=85°C)  $\mathsf{P}_{\mathsf{GM}}$ 10 W Average Gate Power (t=8.3ms, T<sub>C</sub>=85°C) P<sub>G(AV)</sub> 0.5 W Peak Gate Voltage (T<sub>C</sub>=85°C) V<sub>GM</sub> 5.0 V °C Storage Temperature T<sub>stg</sub> -40 to +150 °C Junction Temperature ТJ -40 to +110 Thermal Resistance 3.5 °C/W  $\Theta_{\mathsf{JC}}$ Thermal Resistance 75 °C/W  $\Theta_{\mathsf{JA}}$ Maximum Lead Temperature °C т<sub>L</sub> 260

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

			A Series	<b>B</b> Series	
SYMBOL	TEST CONDITIONS	ΤΥΡ ΜΑΧ	ΤΥΡ ΜΑΧ	ΤΥΡ ΜΑΧ	UNITS
IDRM, IRRM	V <sub>D</sub> =Rated V <sub>DRM,</sub> V <sub>RRM,</sub> T <sub>J</sub> =25°C	10	10	10	μA
I <sub>DRM,</sub> I <sub>RRM</sub>	V <sub>D</sub> =Rated V <sub>DRM,</sub> V <sub>RRM,</sub> T <sub>J</sub> =110°C	2.0	2.0	2.0	mA
I <sub>GT</sub>	V <sub>D</sub> =12V, R <sub>L</sub> =100Ω, QUAD I, T <sub>J</sub> =25°C	30	5.0	3.0	mA
I <sub>GT</sub>	V <sub>D</sub> =12V, R <sub>L</sub> =100Ω, QUAD II, T <sub>J</sub> =25°C	-	5.0	3.0	mA
I <sub>GT</sub>	V <sub>D</sub> =12V, R <sub>L</sub> =100Ω, QUAD III, T <sub>J</sub> =25°C	30	5.0	3.0	mA
I <sub>GT</sub>	$V_D$ =12V, R <sub>L</sub> =100 $\Omega$ , QUAD IV, T <sub>J</sub> =25°C	-	10	5.0	mA
I <sub>GT</sub>	V <sub>D</sub> =12V, R <sub>L</sub> =100Ω, QUAD I, T <sub>J</sub> = -40°C	60	20	15	mA
I <sub>GT</sub>	$V_D$ =12V, R <sub>L</sub> =100 $\Omega$ , QUAD II, T <sub>J</sub> = -40°C	-	20	15	mA
I <sub>GT</sub>	V <sub>D</sub> =12V, R <sub>L</sub> =100Ω, QUAD III, T <sub>J</sub> = -40°C	60	20	15	mA
I <sub>GT</sub>	V <sub>D</sub> =12V, R <sub>L</sub> =100Ω, QUAD IV, T <sub>J</sub> = -40°C	-	30	20	mA
IН	V <sub>D</sub> =12V, I <sub>T</sub> =1.0A, T <sub>J</sub> =25°C	30	15	15	mA
IН	V <sub>D</sub> =12V, I <sub>T</sub> =1.0A, T <sub>J</sub> = -40°C	70	30	30	mA
V <sub>GT</sub>	$V_D$ =12V, RL=100 $\Omega$ , TJ=25°C, QUAD I, II, III, IV	2.0	2.0	2.0	V
V <sub>GT</sub>	$V_D$ =12V, RL=100 $\Omega$ , TJ= -40°C, QUAD I, II, III, IV	2.5	2.5	2.5	V
V <sub>TM</sub>	I <sub>TM</sub> =6.0A	2.0	2.0	2.0	V
t <sub>on</sub>	I <sub>TM</sub> =14A, I <sub>GT</sub> =100mA	1.5	1.5	1.5	μs
dv/dt	V <sub>D</sub> = Rated V <sub>DRM</sub> , I <sub>TM</sub> =5.7A, T <sub>J</sub> =85°C	5.0	5.0	5.0	V/µs

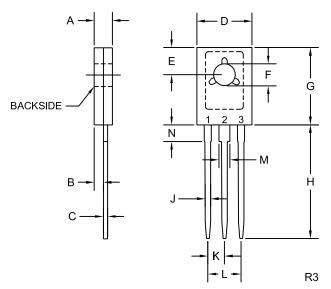
R0 (27-April 2004)



2N6071, A, B 2N6073, A, B 2N6075, A, B

# SENSITIVE GATE TRIAC 4.0 AMPS, 200 THRU 600 VOLTS

**TO-126 CASE - MECHANICAL OUTLINE** 



# LEAD CODE:

1)	MT1
2)	MT2
3)	GATE

#### MARKING CODE: FULL PART NUMBER

DIMENSIONS				
	INCHES		MILLIMETERS	
SYMBOL	MIN	MAX	MIN	MAX
A	0.094	0.110	2.40	2.80
В	0.050		1.27	
С	0.015	0.030	0.38	0.75
D	0.291	0.335	7.40	8.50
E	0.148		3.75	
F	0.118	0.134	3.00	3.40
G	0.413	0.472	10.50	12.00
Н	0.618		15.70	
J	0.024	0.035	0.62	0.90
K	0.089		2.25	
L	0.177		4.50	
М	0.045	0.055	1.14	1.40
N	0.083		2.	10
		т	O_126 (F	

TO-126 (REV:R3)

R0 (27-April 2004)

# **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

#### **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

ss your design challenges.

· Custom product packing

- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- · Application and design sample kits

Custom bar coding for shipments

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).
- 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: <u>www.centralsemi.com/terms</u>





# Product End of Life Notification

PDN ID:	PDN01148
Notification Date:	6/02/20
Last Buy Date:	12/02/20
Last Shipment Date	6/02/21

Summary: The 2N6071 series of SCRs in the TO-126 case is discontinued and now classified as 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.

Central Part Number	Replacement
2N6071A	N/A, Stock Only
2N6071B	N/A, Stock Only
2N6073	N/A, Stock Only
2N6073A	N/A, Stock Only
2N6073B	N/A, Stock Only
2N6075A	N/A, Stock Only
2N6075B	N/A, Stock Only

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. Please email your requests to engineering@centralsemi.com.

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.

# **Mouser Electronics**

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Central Semiconductor: 2N6075A TIN/LEAD