

CentralTM Semiconductor Corp.

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Manufacturers of World Class Discrete Semiconductors

www.centrasemi.com

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

SENSITIVE GATE TRIAC
4.0 AMPS, 200 THRU 600 VOLTS

TO-126 CASE

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.

MAXIMUM RATINGS (T_J=25°C unless otherwise noted)

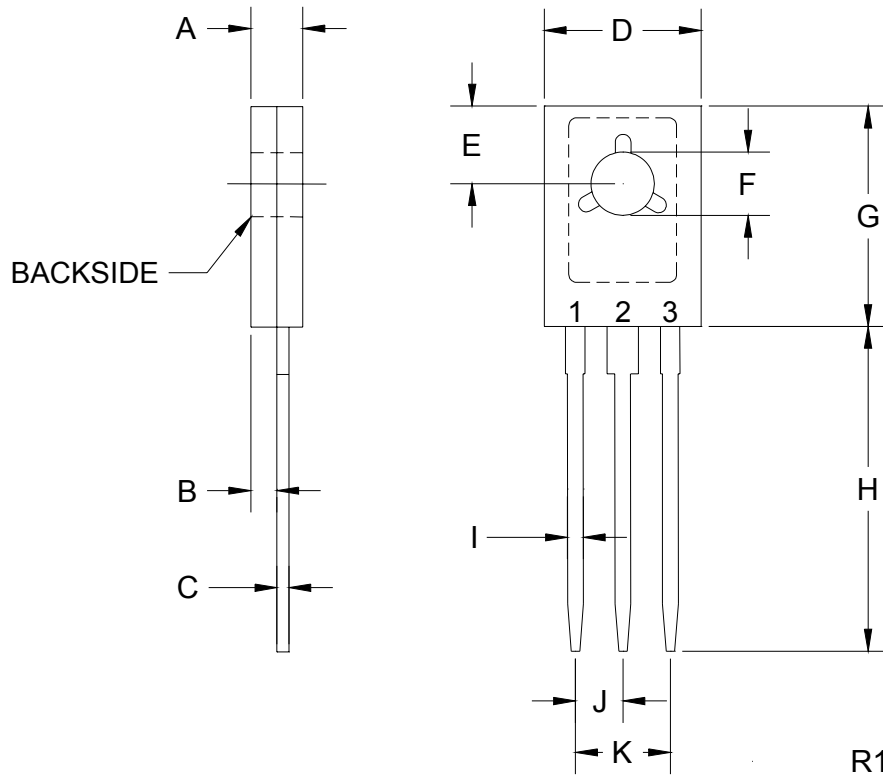
	SYMBOL	2N6071 2N6071A 2N6071B	2N6073 2N6073A 2N6073B	2N6075 2N6075A 2N6075B	UNITS
Peak Repetitive Off-State Voltage	V _{DRM} , V _{RPM}	200	400	600	V
RMS On-State Current (T _C =85°C)	I _{T(RMS)}		4.0		A
Peak One Cycle Surge (60Hz, T _J =110°C)	I _{TSM}		30		A
i ² t Value for Fusing (t=8.3ms)	i ² t		3.7		A ² s
Peak Gate Power (T _C =85°C)	P _{GM}		10		W
Average Gate Power (t=8.3ms, T _C =85°C)	P _{G(AV)}		0.5		W
Peak Gate Voltage (T _C =85°C)	V _{GM}		5.0		V
Storage Temperature	T _{stg}		-40 to +150		°C
Junction Temperature	T _J		-40 to +110		°C
Thermal Resistance	θ _{JC}		3.5		°C/W
Thermal Resistance	θ _{JA}		75		°C/W
Maximum Lead Temperature	T _L		260		°C

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

SYMBOL	TEST CONDITIONS	A SERIES			B SERIES			UNITS
		MIN	TYP	MAX	MIN	TYP	MAX	
I _{DRM} , I _{RPM}	V _D =Rated V _{DRM} , V _{RPM} , T _J =25°C			10			10	µA
I _{DRM} , I _{RPM}	V _D =Rated V _{DRM} , V _{RPM} , T _J =110°C			2.0			2.0	mA
I _{GT}	V _D =12V, R _L =100Ω, QUAD I, T _J =25°C			30			5.0	mA
I _{GT}	V _D =12V, R _L =100Ω, QUAD II, T _J =25°C			--			5.0	mA
I _{GT}	V _D =12V, R _L =100Ω, QUAD III, T _J =25°C			30			5.0	mA
I _{GT}	V _D =12V, R _L =100Ω, QUAD IV, T _J =25°C			--			10	mA
I _{GT}	V _D =12V, R _L =100Ω, QUAD I, T _J =-40°C			60			20	mA
I _{GT}	V _D =12V, R _L =100Ω, QUAD II, T _J =-40°C			--			20	mA
I _{GT}	V _D =12V, R _L =100Ω, QUAD III, T _J =-40°C			60			20	mA
I _{GT}	V _D =12V, R _L =100Ω, QUAD IV, T _J =-40°C			--			30	mA
I _H	V _D =12V, I _T =1.0A, T _J =25°C			30			15	mA
I _H	V _D =12V, I _T =1.0A, T _J =-40°C			70			30	mA
V _{GT}	V _D =12V, R _L =100Ω, T _J =25°C, QUAD I, II, III, IV			2.0			2.0	V
V _{GT}	V _D =12V, R _L =100Ω, T _J =-40°C, QUAD I, II, III, IV			2.5			2.5	V
V _{TM}	I _{TM} =6.0A			2.0			2.0	V
t _{on}	I _{TM} =14A, I _{GT} =100mA		1.5		1.5		1.5	µs
dv/dt	V _D =Rated V _{DRM} , I _{TM} =5.7A, T _J =85°C		5.0		5.0		5.0	V/µs

(SEE REVERSE SIDE)

TO-126 PACKAGE - MECHANICAL OUTLINE



SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.094	0.106	2.39	2.69
B	0.047		1.19	
C	0.019	0.029	0.48	0.74
D	0.295	0.307	7.49	7.80
E	0.149		3.78	
F	0.118	0.126	3.00	3.20
G	0.413	0.425	10.49	10.80
H	0.618		15.70	
I	0.027	0.035	0.69	0.89
J	0.087		2.21	
K	0.173		4.39	

TO-126 (REV:R1)

Lead Code:
 1) MT1
 2) MT2
 3) GATE

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