



TO-92 Plastic-Encapsulate Thyristors

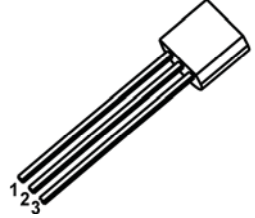
PCR406/PCR606 Silicon Controlled Rectifier

MAIN FEATURES

Symbol	Value	Unit
$I_{T(RMS)}$	0.6	A
V_{DRM}	PCR406	400
	PCR606	600
T_j	Junction Temperature	-40 ~ 125
T_{stg}	Storage Temperature	-40 ~ 150

TO-92

- 1.CATHODE
- 2.GATE
- 3.ANODE



DESCRIPTION

Logic level sensitive gate triac intended to be interfaced directly to microcontrollers, logic integrated circuits and other low power gate trigger circuits.

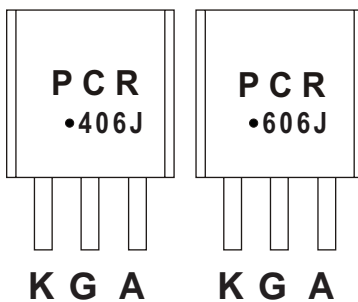
FEATURES

- Blocking voltage to 400 V (PCR406)
- RMS on-state current to 0.6 A
- General purpose switching

APPLICATIONS

- General purpose switching
- Phase control applications
- Solid state relays

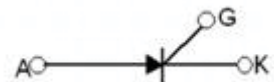
MARKING



PCR406 PCR606=Device code

Solid dot=Green molding compound device, if none,the normal device

Equivalent Circuit



ORDERING INFORMATION

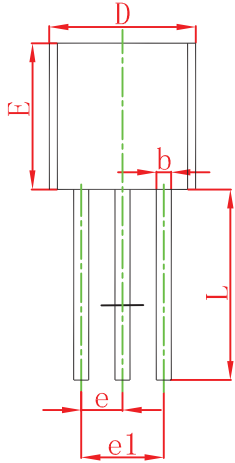
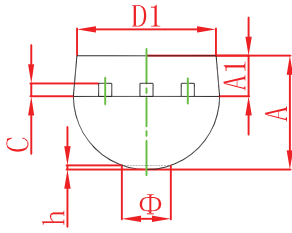
Part Number	Package	Packing Method	Pack Quantity
PCR406	TO-92	Bulk	1000pcs/Bag
PCR406-TA	TO-92	Tape	2000pcs/Box
PCR606	TO-92	Bulk	1000pcs/Bag
PCR606-TA	TO-92	Tape	2000pcs/Box

ELECTRICAL CHARACTERISTICS

$T_a=25^\circ\text{C}$ unless otherwise specified

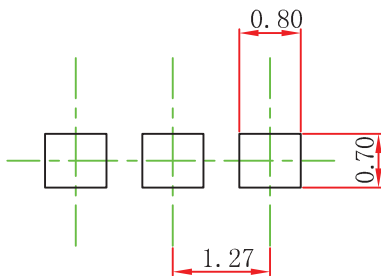
Parameter	Symbol	Test conditions	Min	Max	Unit	
On state voltage	V_{TM}	$I_{TM}=0.6A$		1.7	V	
Gate trigger voltage	V_{GT}	$V_{AK}=7V$		0.8	V	
Repetitive peak off-state voltage	$V_{DRM}(PCR406)$	$I_{DRM}=10\mu A$	400		V	
	$V_{DRM}(PCR606)$		600		V	
Holding current	I_H	$I_{HL}=20\text{ mA}, V_{AK}=7\text{ V}$		5	mA	
Gate trigger current	I_{GT}	$V_{AK}=7V$	A2	5	15	μA
			A1	15	40	μA
			A-1	40	60	μA
			A-2	60	80	μA
			B	80	120	μA

TO-92 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	3.300	3.700	0.130	0.146
A1	1.100	1.400	0.043	0.055
b	0.380	0.550	0.015	0.022
c	0.360	0.510	0.014	0.020
D	4.300	4.700	0.169	0.185
D1	3.430		0.135	
E	4.300	4.700	0.169	0.185
e	1.270 TYP		0.050 TYP	
e1	2.440	2.640	0.096	0.104
L	14.100	14.500	0.555	0.571
K		1.600		0.063
h	0.000	0.380	0.000	0.015

TO-92 Suggested Pad Layout



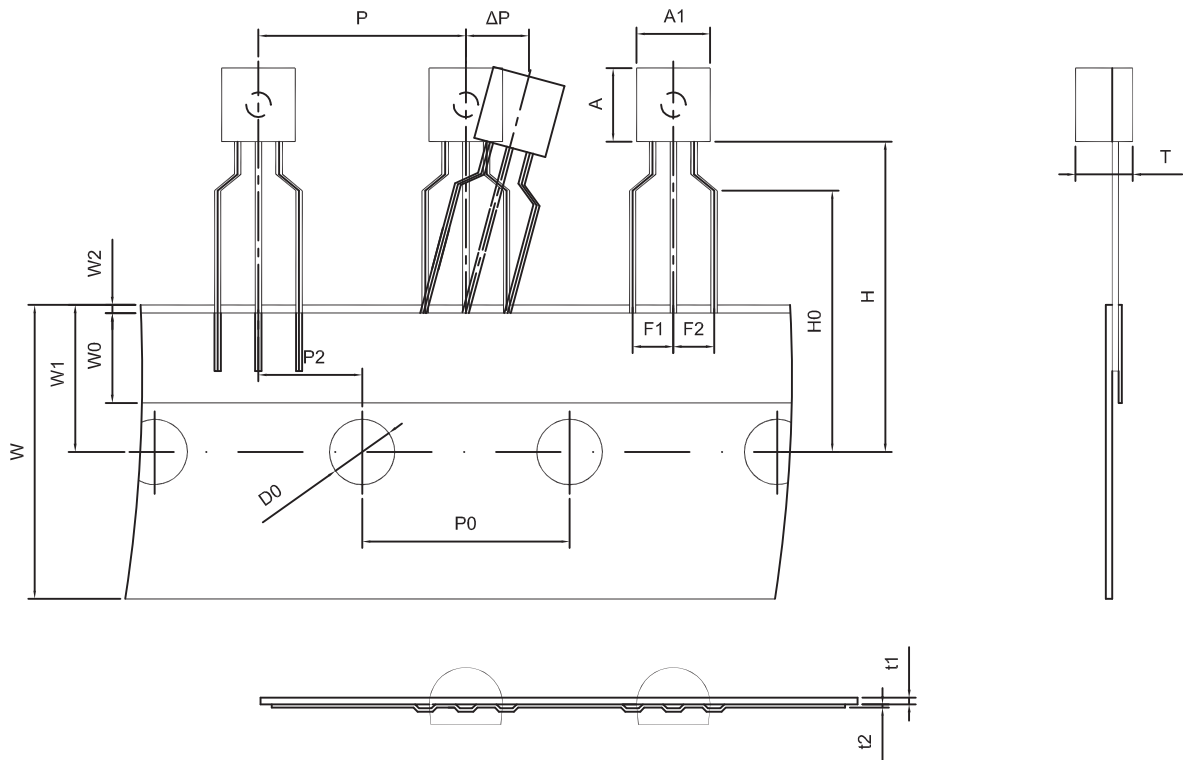
Note:

1. Controlling dimension: in millimeters.
2. General tolerance: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.

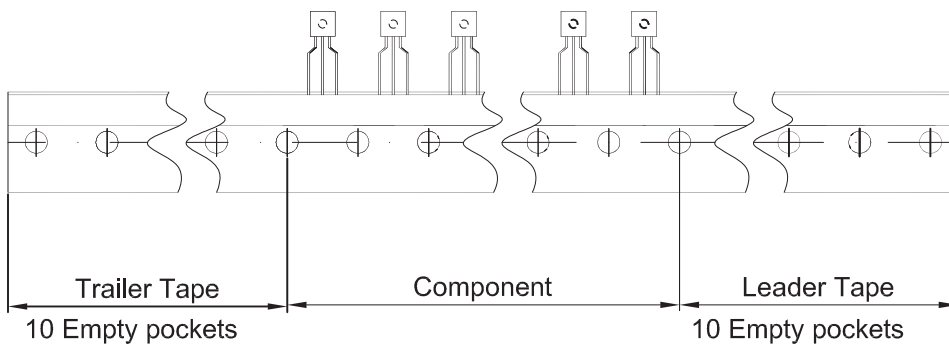
NOTICE

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TO-92 PACKAGE TAPEING DIMENSION



Dimiensions are in millimeter								
A1	A	T	P	P0	P2	F1	F2	W
4.5	4.5	3.5	12.7	12.7	6.35	2.5	2.5	18.0
W0	W1	W2	H	H0	D0	t1	t2	ΔP
6.0	9.0	1.0 MAX.	19.0	16.0	4.0	0.4	0.2	0



Package	Box	Box Size(mm)	Carton	Carton Size(mm)
TO-92	2000 pcs	333×162×43	20,000 pcs	350×340×250