



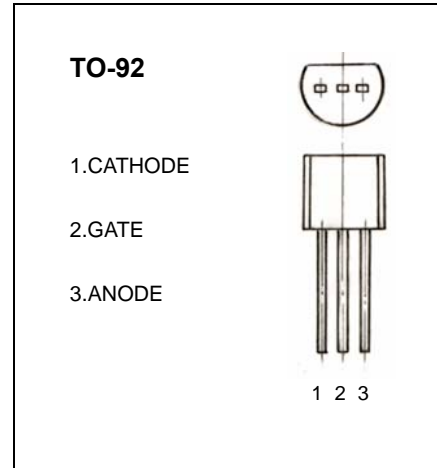
TO-92 Plastic-Encapsulate Thyristors

PCR406

Silicon Planar pnpn Thyristor

**MAIN FEATURES**

Symbol		value	unit
$I_{T(RMS)}$		0.6	A
$V_{DRM}/V_{RRM}$	PCR406	400	V
	PCR606	600	
$T_J$	Junction Temperature	-40 to 125	°C
$T_{stg}$	Storage Temperature	-40 to 150	°C



**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**

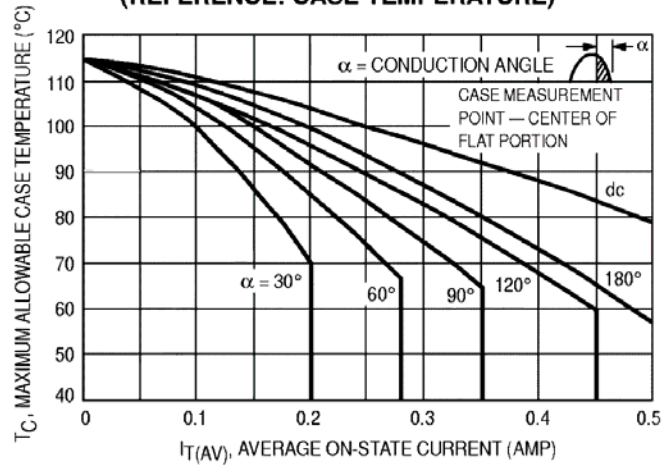
- General purpose switching
- Phase control applications
- Solid state relays.

**ELECTRICAL CHARACTERISTICS (Tamb=25°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	$I_H$	$I_{HL}= 20 mA, V_{AK} = 7 V$		5	mA	
Gate trigger current	$I_{GT}$	$V_{AK}=7V$	A2	5	15	$\mu A$
			A1	15	30	$\mu A$
			A-1	30	45	$\mu A$
			A-2	45	60	$\mu A$
			A	60	80	$\mu A$
			B	80	120	$\mu A$

## Typical Characteristics

**FIGURE 1 – MCR100-8 CURRENT DERATING  
(REFERENCE: CASE TEMPERATURE)**



**FIGURE 2 – MCR100-8 CURRENT DERATING  
(REFERENCE: AMBIENT TEMPERATURE)**

