

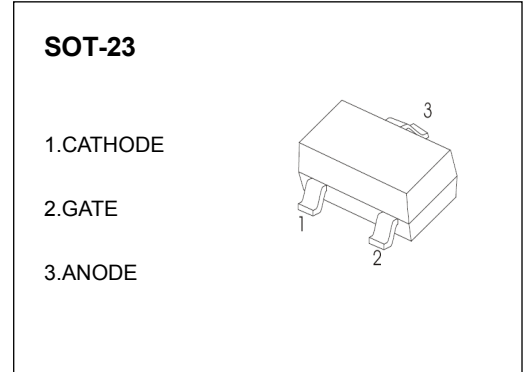


# SOT-23 Plastic-Encapsulate Thyristors

## PCR0.6 Silicon Planar DBDB Thyristor

### MAIN FEATURES

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

- RMS on-state current to 0.6 A
- General purpose switching

### APPLICATIONS

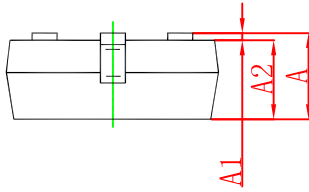
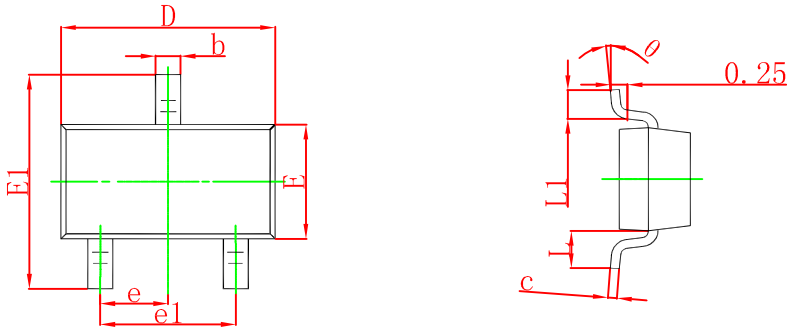
- General purpose switching
- Phase control applications
- Solid state relays

‘A5 F ? -B; .( \$\* Z \* \$\* ’

### ELECTRICAL CHARACTERISTICS ( $T_a=25^{\circ}\text{C}$ unless otherwise specified)

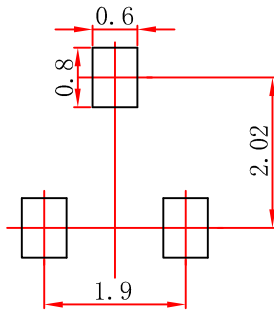
Parameter	Symbol	Test conditions	Min	Max	Unit
On state voltage	$V_{TM}$	$I_{TM}=0.6\text{A}$		1.7	V
Gate trigger voltage	$V_{GT}$	$V_{AK}=7\text{V}$		0.8	V
Repetitive peak off-state voltage	$V_{DRM(PCR406)}$	$I_{DRM}=10\mu\text{A}$	400		V
	$V_{DRM(PCR606)}$		600		V
Holding current	$I_H$	$I_T=600\text{mA}, I_G=60\text{V}$		5	mA
Gate trigger current	$I_{GT}$	$V_{AK}=7\text{V}$	5	40	$\mu\text{A}$

## SOT-23 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.080	0.150	0.003	0.006
D	2.800	3.000	0.110	0.118
E	1.200	1.400	0.047	0.055
E1	2.250	2.550	0.089	0.100
e	0.950 TYP		0.037 TYP	
e1	1.800	2.000	0.071	0.079
L	0.550 REF		0.022 REF	
L1	0.300	0.500	0.012	0.020
θ	0°	8°	0°	8°

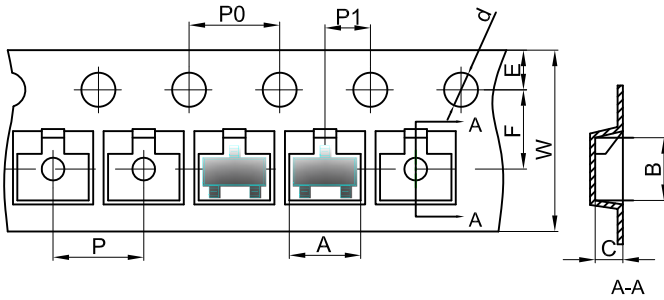
## SOT-23 Suggested Pad Layout



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

# SOT-23 Tape and Reel

## SOT-23 Embossed Carrier Tape



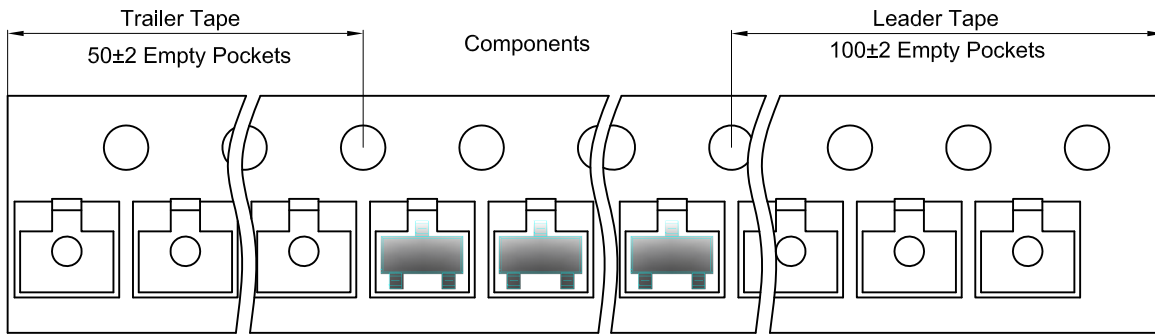
### Packaging Description:

SOT-23 parts are shipped in tape. The carrier tape is made from a dissipative (carbon filled) polycarbonate resin. The cover tape is a multilayer film (Heat Activated Adhesive in nature) primarily composed of polyester film, adhesive layer, sealant, and anti-static sprayed agent. These reeled parts in standard option are shipped with 3,000 units per 7" or 17.8cm diameter reel. The reels are clear in color and is made of polystyrene plastic (anti-static coated).

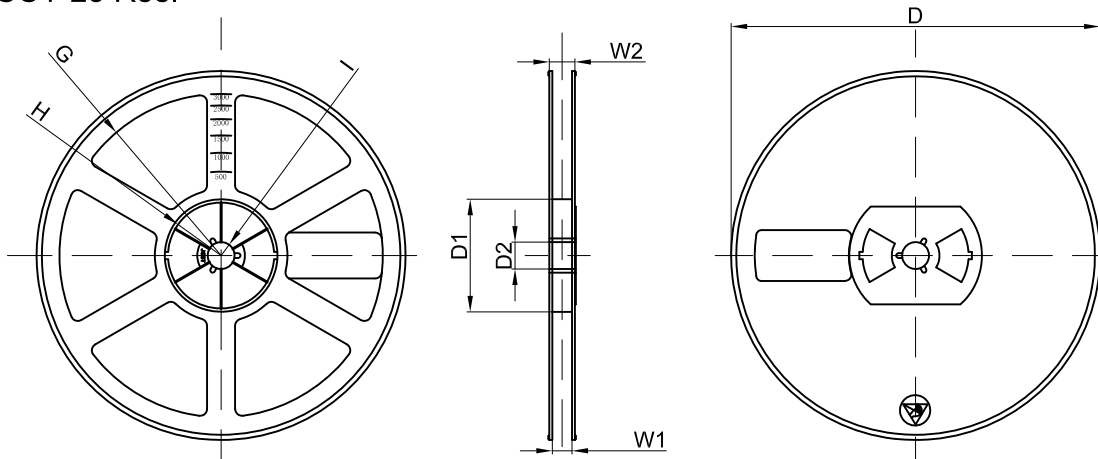
Dimensions are in millimeter

Pkg type	A	B	C	d	E	F	P0	P	P1	W
SOT-23	3.15	2.77	1.22	Ø1.50	1.75	3.50	4.00	4.00	2.00	8.00

## SOT-23 Tape Leader and Trailer



## SOT-23 Reel



Dimensions are in millimeter

Reel Option	D	D1	D2	G	H	I	W1	W2
7"Dia	Ø178.00	54.40	13.00	R78.00	R25.60	R6.50	9.50	12.30

REEL	Reel Size	Box	Box Size(mm)	Carton	Carton Size(mm)	G.W.(kg)
3000 pcs	7 inch	45,000 pcs	203×203×195	180,000 pcs	438×438×220	