

SCR

PCR406/PCR606

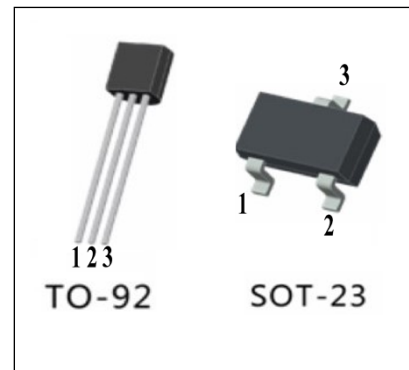
FEATURES

- Blocking voltage to 400 V/600V
- RMS on-state current to 0.6 A
- General purpose switching

APPLICATIONS

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

SYMBOL



Package	Pin assignment		
	1	2	3
TO-92	K	G	A
SOT-23	K	G	A

ABSOLUTE MAXIMUM RATINGS

PARAMETER	SYMBOL	VALUE		UNIT
Repetitive Peak Off-State Voltages	V_{DRM}	PCR406	400	V
		PCR606	600	
RMS on-State Current	$I_{T(RMS)}$	0.6		A
Non-Repetitive Peak On-State Current	I_{TSM}	6		A
Peak gate current	I_{GM}	0.5		A
Peak Gate Power	$P_{G(AV)}$	0.1		W
Operating junction temperature	T_J	-40~+125		°C
Storage Temperature	T_{STG}	-40~+150		°C

ELECTRICAL CHARACTERISTICS (T_J=25°C)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
Peak Repetitive Forward or Reverse Blocking Current	I_{DRM}	$V_{AK} = \text{Rated } V_{DRM}$			5	uA
Gate Trigger Current	I_{GT}	$V_D=12V, R_L=100\Omega$	5		100	uA
Gate Trigger Voltage	V_{GT}	$V_D=12V, R_L=100\Omega$			0.8	V
Peak Forward On-State Voltage	V_{TM}	$I_T= 0.6A$			1.7	V
Latch Current	I_L	$I_G=1.2I_{GT}$			6	mA
Holding Current	I_H	$I_T=50mA$			5	mA
Gate Non-Trigger Voltage	V_{GD}	$V_D= V_{DRM}$	0.1			v
Critical Rate of Rise of Off-State Voltage	dV/dt	$V_D=67\%V_{DRM}, R_{GK}=1k\Omega,$	10			V/μs