

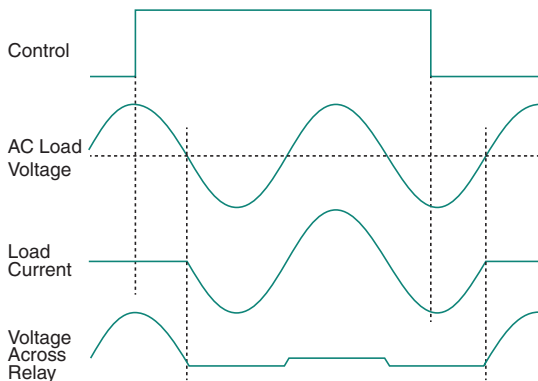
Solid State AC Switches

Optically Isolated SCR-Based AC Power Switches

Zero-Cross Turn-On AC Power Switches

IXYS Integrated Circuits Division's zero-cross turn-on AC power switches are designed to begin passing AC current after the DC input control current is applied and when the load voltage crosses zero Volts. In addition, the nature of the output SCRs is to turn off only after the DC input control current is removed and when the applied voltage is near zero Volts. As a result, for both turn-on and turn-off, switching occurs when picking up or dropping off the load will generate the least transients.

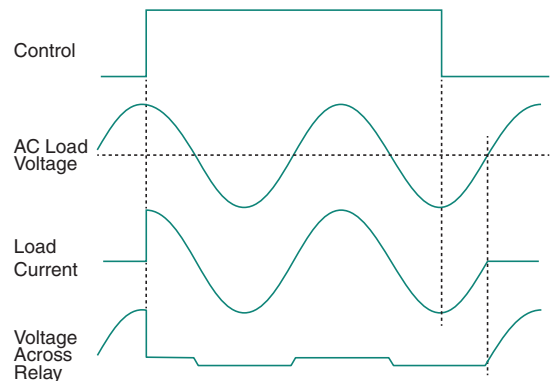
- Load Current up to $20A_{rms}$ with $5^{\circ}C/W$ Heat Sink
- Blocking Voltages up to $800V_p$
- Input-to-Output Isolation up to $5000V_{rms}$
- AC Load Voltages from $5V_{rms}$ to $550V_{rms}$



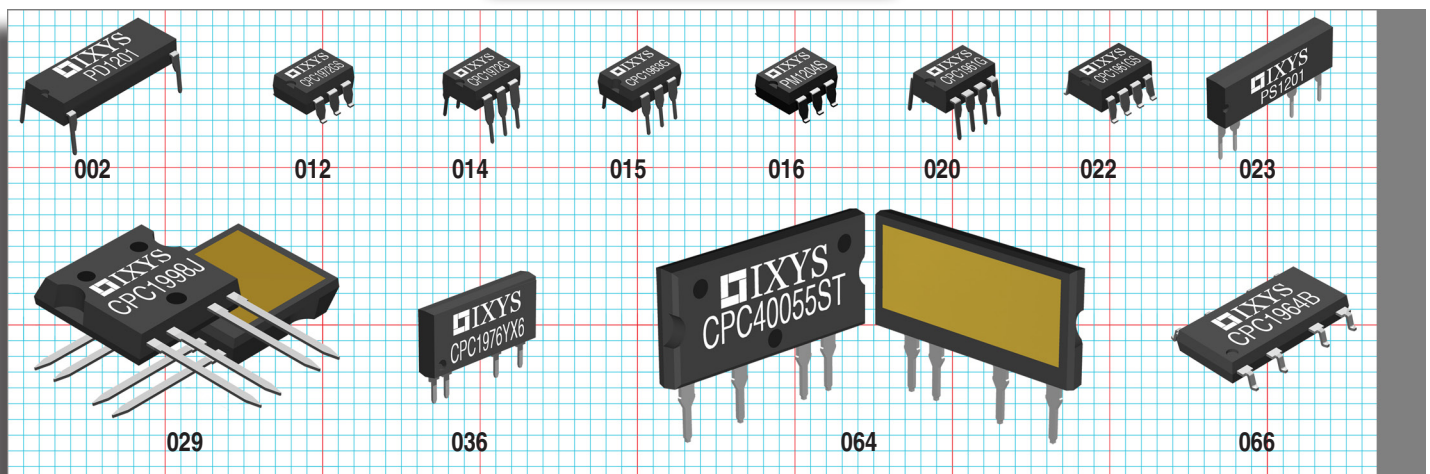
Rapid Turn-On AC Power Switches

IXYS Integrated Circuits Division's rapid turn-on AC power switches begin passing AC current within $500\mu s$ of the application of the DC input control current. In this manner, the turn-on time of the AC switch can be very accurately determined. When the DC control signal is removed, the output SCRs will turn off when the load voltage approaches zero Volts.

- Load Current up to $3A_{rms}$
- Blocking Voltages up to $600V_p$
- Input-to-Output Isolation up to $5000V_{rms}$
- AC Load Voltages from $20V_{rms}$ to $240V_{rms}$



AC Switch Packages



SCR-Based AC Power Switches (Zero-Cross Turn-On)

Part Number	AC Operating Voltage	Blocking Voltage	Operating Frequency	Load Current		Switching Speed	Input Control Current	Isolation Voltage	Package Type
				Free Air	5°C/W Heat Sink				
	(V _{rms})	(V _p)	(Hz)	(A _{rms})		(cycles)	(mA _{DC})	(V _{rms})	
CPC1943	20 - 120	400	20 - 500	0.5	-	0.5	5	3750	015, 016
CPC1945G	20 - 120	400	20 - 400	1	-	0.5	5	3750	002
CPC1945Y	20 - 120	400	20 - 400	1	-	0.5	5	3750	023
CPC1961	20 - 260	600	20 - 500	0.25	-	0.5	5	3750	020, 022
CPC1963	20 - 260	600	20 - 500	0.5	-	0.5	5	3750	015, 016
CPC1964B	20 - 280	800	20 - 500	1.5	-	0.5	5	5000	066
CPC1965G	20 - 260	600	20 - 400	1	-	0.5	5	3750	002
CPC1965Y	20 - 260	600	20 - 400	1	-	0.5	5	3750	023
CPC1966	20 - 240	600	20 - 500	3	-	0.5	5	3750	036
CPC1966B	20 - 240	800	20 - 500	3	-	0.5	5	5000	066
CPC1972	5 - 550	800	20 - 500	0.25	-	0.5	5	3750	012, 014
CPC1976	20 - 240	600	20 - 500	2	-	0.5	5	3750	036
CPC1998	20 - 240	800	20 - 500	5	20	0.5	5	2500	029
CPC40055ST	20 - 280	800	20 - 500	5	20	0.5	5	2500	064
PD1201	20 - 120	400	20 - 500	1	-	0.5	5	3750	002
PD2401	20 - 240	500	20 - 500	1	-	0.5	5	3750	002
PD2601	20 - 260	600	20 - 500	1	-	0.5	5	3750	002
PM1204	20 - 120	400	20 - 500	0.5	-	0.5	5	3750	015, 016
PM1205	20 - 240	500	20 - 500	0.5	-	0.5	5	3750	015, 016
PM1206	20 - 260	600	20 - 500	0.5	-	0.5	5	3750	015, 016
PS1201	20 - 120	400	20 - 500	1	-	0.5	5	3750	023
PS2401	20 - 240	500	20 - 500	1	-	0.5	5	3750	023
PS2601	20 - 260	600	20 - 500	1	-	0.5	5	3750	023

SCR-Based AC Power Switches (Rapid Turn-On)

Part Number	AC Operating Voltage	Blocking Voltage	Operating Frequency	Load Current	Switching Speed		Input Control Current	Isolation Voltage	Package Type
					t _{on}	t _{off}			
	(V _{rms})	(V _p)	(Hz)	(A _{rms})	(μs)	(cycles)	(mA _{DC})	(V _{rms})	
CPC1964BX6	20 - 240	600	20 - 500	1.5	500	0.5	5	5000	066
CPC1966YX6	20 - 240	600	20 - 500	3	500	0.5	5	3750	036
CPC1976YX6	20 - 240	600	20 - 500	2	500	0.5	5	3750	036

For more information about IXYS Integrated Circuits Division's Rapid Turn-On SCR-based AC Relays, please visit:

<http://www.ixysic.com/Products/SSRACRTO.htm>

For more information about IXYS Integrated Circuits Division's Zero-Cross Turn-On SCR-based AC Relays, please visit:

<http://www.ixysic.com/Products/SSRACSwitch.htm>

For additional information, contact your IXYS IC Division Representative:

<http://www.ixysic.com/home/pages.nsf/locate.rep>

Or visit IXYS IC Division's web site:

<http://www.ixysic.com>