

Double SCR Solid State Relay

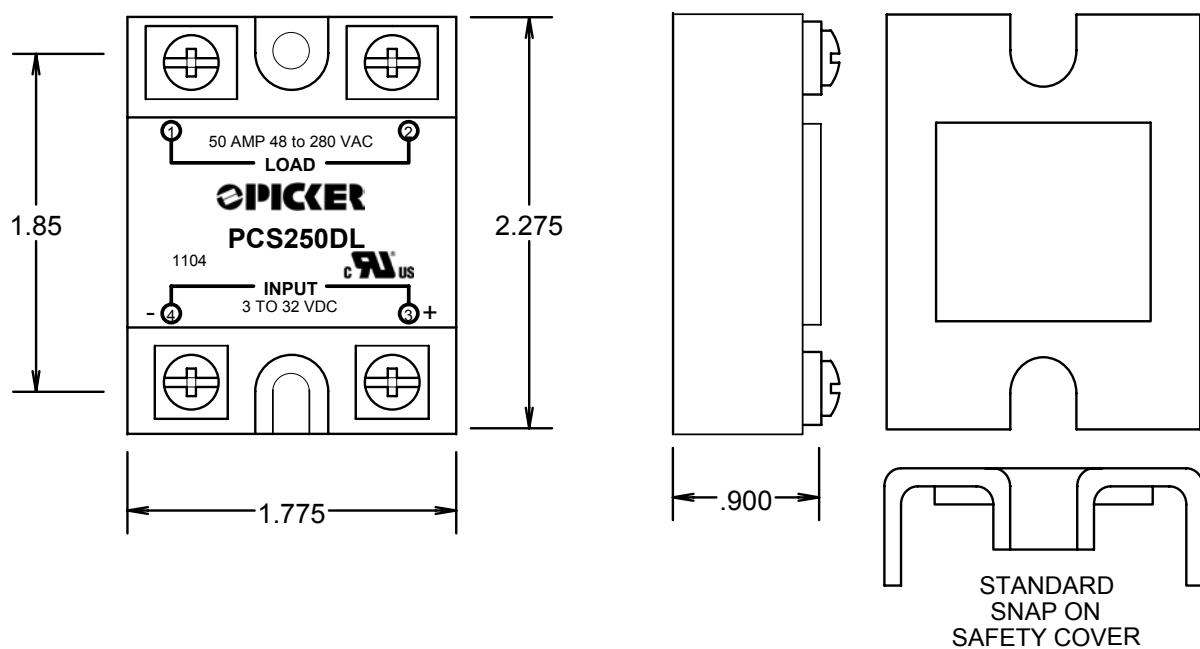
PCS



FEATURES

- Industry standard "Hockey Puck" design
- Solid Epoxy Body Resistant to the environment
- 4,000 Volt isolation between input and output
- 3 to 32 Volt DC or 90 to 240 Volt AC input
- Completely sealed, Immersion cleanable
- 40 to 80 Amp Output
- 48 to 280, 48 to 400 or 48 to 530 VAC Output
- Zero crossing or Random turn-on switching
- Built in snubber network
- Very high surge resistance
- Back to Back SCR output
- Built in LED indicator

Dimensions in Inches



Absolute Maximum Ratings at 25 Degrees C

Parameter		Symbol	Rating	Unit
Input	Input signal voltage	V_{IN}	3-32 90-280	VDC VAC
	Drop out voltage	V_{do}	1 10	VDC VAC
Output	RMS on state current	I_T	40, 50, 60, 70 and 80	A rms
	Peak one cycle surge current	I_{surge}	10x I _T	A
	Repetitive peak off state voltage	V_{DRM}	600 *See note 2	V
	Operating frequency	f	47 - 70	Hz
	Critical rate of rise on state current	di/dt	50	A/ μ S
	Load supply voltage	V_{out}	48 to 530	Vrms AC
Isolation voltage input to output		V_{iso}	4000	Vrms
Operating temperature		T_{opr}	-30 - 80	°C
Storage temperature		T_{stg}	-30 - 100	°C
Soldering temperature 10 seconds		T_{sol}	260	°C

Electrical Characteristics at 25 Degrees C

Parameter		Symbol	Conditions	Unit
Input	Pick up voltage	V_{pu}	I _t =1Arms	3 VDC MAX 90 VAC MAX
	Input current	I_{in}	V _{in} =4 - 32V	5 TO 25 mA
Output	On state voltage	V_T	I _t =1Arms	1.7V rms MAX
	Operating current	I_{op}	V _{out} =240 Vrms	50 mArms MIN
	Leakage current	I_{leak}	V _{out} =240 Vrms	5 mArms
	Critical rate of rise of off state voltage	dv/dt	See Note 1	500V/ μ S
	Zero cross voltage	V_{ox}	I _{in} =7mA	35 VAC MAX
	Load voltage rating	V_{out}	I _T =50mArms MIN	48 TO 530VAC
Minimum trigger current		I_{FT}	V _{DRM} =600V	25 mA MAX
Isolation resistance input to circuit		R_{iso}	DC 500V	10 ¹⁰ OHMS MIN
Random Turn on time DC Input		T_{on}	48 to 70Hz AC	1 ms
Turn on time Zero Cross DC input		T_{on}	48 to 70Hz AC	1/2 cycle + 1ms
Turn on time Zero Cross AC input		T_{on}	48 to 70Hz AC	20 ms
Max Turn off time DC input		T_{off}	48 to 70Hz AC	1/2 cycle + 1ms
Max Turn off time AC input		T_{off}	48 to 70Hz AC	40 ms

Ordering Example:	PCS	2	50	A	L	-1	
Model							
Output Voltage Rating							
2: 240 (48 to 280 VAC)							
3: 380 (48 to 400 VAC)							
4: 480 (48 to 539 VAC)							
Load Current							
40: 40A, 50: 50A, 60: 60A, 70: 70A, 80: 80A							
Input Type							
D: 3 to 32 VDC, A1: 90 to 130 VAC, A2: 180 to 260							
Indication							
NIL: None, L: LED							
Zero Cross Function							
Nil: Zero Cross Turn On, -1: Random Turn On							

