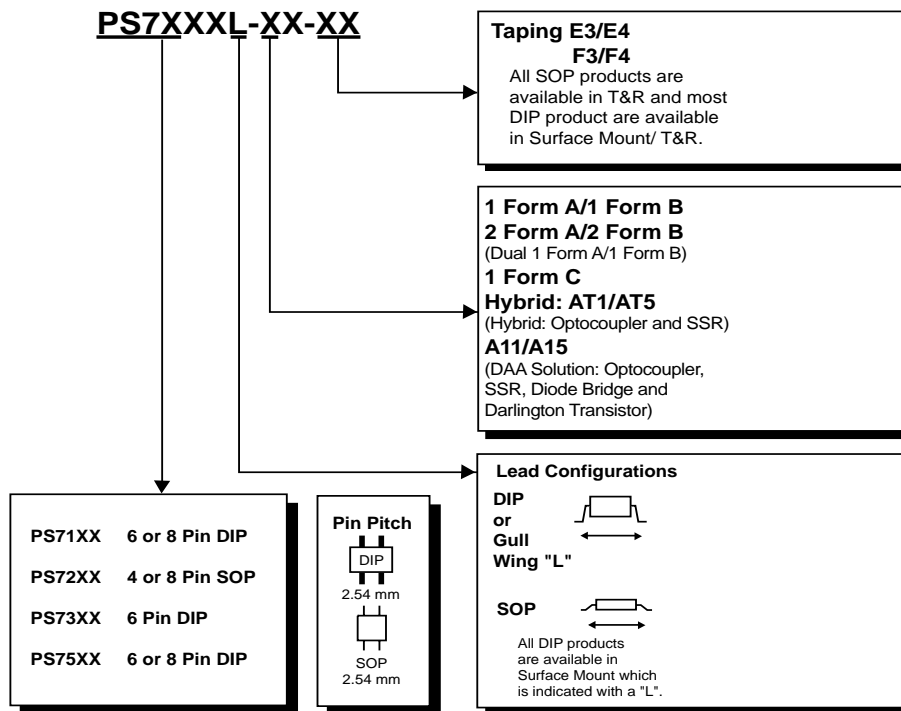
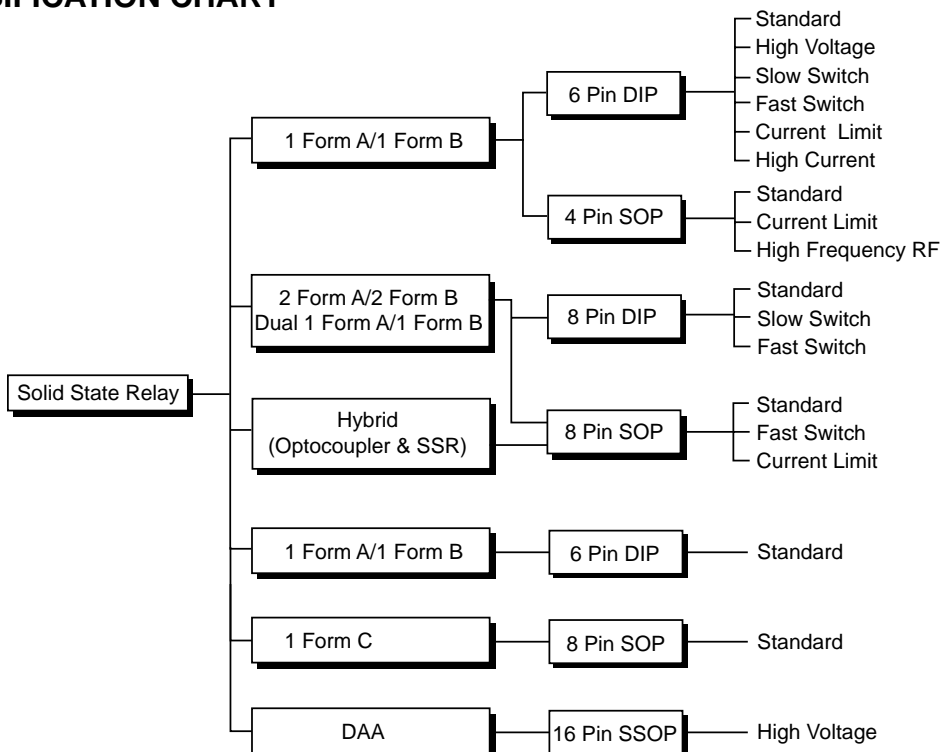


Solid State Relays Selection Guide

NUMBERING SYSTEM



CLASSIFICATION CHART



ELECTRICAL CHARACTERISTICS

6 Pin DIP (1 Form A/1 Form B)

Type Number	R _{on} (Ω)	V _L (V)	I _L (mA)	P _T (mW)	V _{iso} (V)	T _{OPT} (°C)	T _{STG} (°C)	t _{ON} (ms)	t _{OFF} (ms)	Current Limit
PS710A-1A	0.2	60	1,800	610	1500	-40 to 85	-40 to 100	3.0	1.0	120
PS7112-1A	6	100	200	610	1500	-40 to 80	-40 to 100	0.4	0.2	
PS7113-1A	2.5	100	350	610	1500	-40 to 80	-40 to 100	3.0	0.2	
PS7122-1A	5	200	200	610	1500	-40 to 80	-40 to 100	2.0	0.2	
PS7141-1A	30	400	150	610	1500	-40 to 80	-40 to 100	1.0	0.2	
PS7141-1B	30	400	150	610	1500	-40 to 80	-40 to 100	0.2	1.0	
PS7142-1A	10	400	200	610	1500	-40 to 80	-40 to 100	5.0	0.2	
PS7160-1A	50	600	90	610	1500	-40 to 80	-40 to 100	1.5	0.2	
PS7341-1A	30	400	150	610	3750	-40 to 85	-40 to 125	1.0	0.2	
PS7341C-1A	35	400	120	610	3750	-40 to 85	-40 to 125	1.0	1.0	
PS7341-1B	30	400	150	610	3750	-40 to 85	-40 to 125	0.2	1.0	
PS7341B-1B	70	400	90	610	3750	-40 to 85	-40 to 125	0.2	1.5	
PS7342-1A	10	400	200	610	3750	-40 to 85	-40 to 125	2.5	0.2	
PS7360-1A	50	600	90	610	3750	-40 to 85	-40 to 125	2.0	0.2	
PS7522-1A	5	200	200	1500	1500	-40 to 80	-40 to 100	12.0	6.5	

4 Pin SOP (1 Form A/1 Form B)

Type Number	R _{on} (Ω)	V _L (V)	I _L (mA)	P _T (mW)	V _{iso} (V)	T _{OPT} (°C)	T _{STG} (°C)	t _{ON} (ms)	t _{OFF} (ms)	Current Limit
PS7200A-1A	12	40	100	150	1500	-40 to 80	-40 to 100	0.5	0.2	
PS7200B-1A	1.0	40	250	150	1500	-40 to 80	-40 to 100	1.0	0.2	
PS7200R-1A	14	40	120	150	1500	-40 to 80	-40 to 100	0.5	1.0	
PS7241-1A	30	400	120	350	1500	-40 to 80	-40 to 100	2.0	0.2	
PS7241-1B	35	400	120	350	1500	-40 to 80	-40 to 100	0.2	2.0	

8 Pin DIP (2 Form A/2 Form B, Dual 1 Form A/1 Form B)

Type Number	R _{on} (Ω)	V _L (V)	I _L (mA)	P _T (mW)	V _{iso} (V)	T _{OPT} (°C)	T _{STG} (°C)	t _{ON} (ms)	t _{OFF} (ms)	Current Limit
PS7111-2A	6.0	100	100	850	1500	-40 to +80	-40 to +100	0.4	0.2	
PS7113-2A	2.5	100	350	850	1500	-40 to 80	-40 to 100	3.0	0.2	
PS7122-2A	5.0	200	200	850	1500	-40 to 80	-40 to 100	2.0	0.2	
PS7141-2A	30	400	150	850	1500	-40 to 80	-40 to 100	1.0	0.2	
PS7141-2B	30	400	150	850	1500	-40 to 80	-40 to 100	0.2	1.0	
PS7141-1C	30	400	150	850	1500	-40 to 80	-40 to 100	1.0	0.2	
PS7142-2A	12	400	200	850	1500	-40 to 80	-40 to 100	2.0	0.2	
PS7160-2A	50	600	90	850	1500	-40 to 80	-40 to 100	1.5	0.2	
PS7522-2A	5.0	200	200	850	1500	-40 to 80	-40 to 100	12	6.5	

ELECTRICAL CHARACTERISTICS *continued*

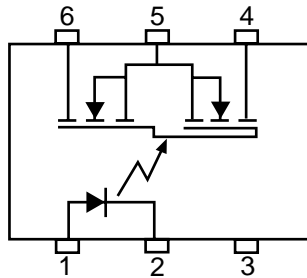
8 Pin SOP (2 Form A/2 Form B, Dual 1 Form A/1 Form B)

Type Number	R _{on} (Ω)	V _L (V)	I _L (mA)	P _T (mW)	V _{iso} (V)	T _{OPT} (°C)	T _{STG} (°C)	t _{on} (ms)	t _{off} (ms)	Current Limit
PS7211-2A	6.0	100	100	460	1500	-40 to 80	-40 to 100	1.0	0.2	
PS7221-2A	10.0	260	170	460	1500	-40 to 80	-40 to 100	1.0	0.2	
PS7241-2A	30	400	120	460	1500	-40 to 80	-40 to 100	1.0	0.2	
PS7241-2B	30	400	120	460	1500	-40 to 80	-40 to 100	0.2	1.0	
PS7241-1C	30	400	120	460	1500	-40 to 80	-40 to 100	1.0	0.2	

8 Pin SOP (Hybrid, Optocoupler & SSR)

Type Number	R _{on} (Ω)	V _L (V)	I _L (mA)	P _T (mW)	V _{iso} (V)	T _{OPT} (°C)	T _{STG} (°C)	t _{on} (ms)	t _{off} (ms)	Current Limit
PS7241-AT1	30	400	120	630	1500	-40 to 80	-40 to 100	1.0	0.2	
PS7241-AT5	30	400	120	630	1500	-40 to 80	-40 to 100	1.0	0.2	

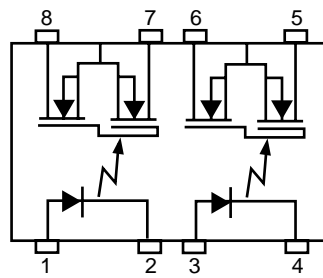
PIN CONNECTIONS



1. LED Anode
2. LED Cathode
3. NC
4. MOSFET Drain
5. MOSFET Source
6. MOSFET Drain

1 Form A/1 Form B

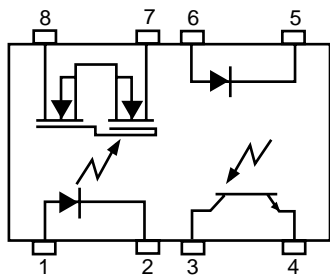
Available in 6 pin DIP



1. LED Anode
2. LED Cathode
3. LED Anode
4. LED Cathode
5. MOSFET
6. MOSFET
7. MOSFET
8. MOSFET

2 Form A/2 Form B, Dual 1 Form A/1 Form B

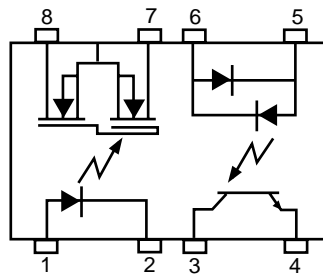
All available in 8 pin SOP & DIP packages



1. LED Anode
2. LED Cathode
3. Tr Collector
4. Tr Emitter
5. LED Anode
6. LED Cathode
7. MOSFET
8. MOSFET

DC Hybrid: Optocoupler plus SSR

1 Form A in 8 pin SOP

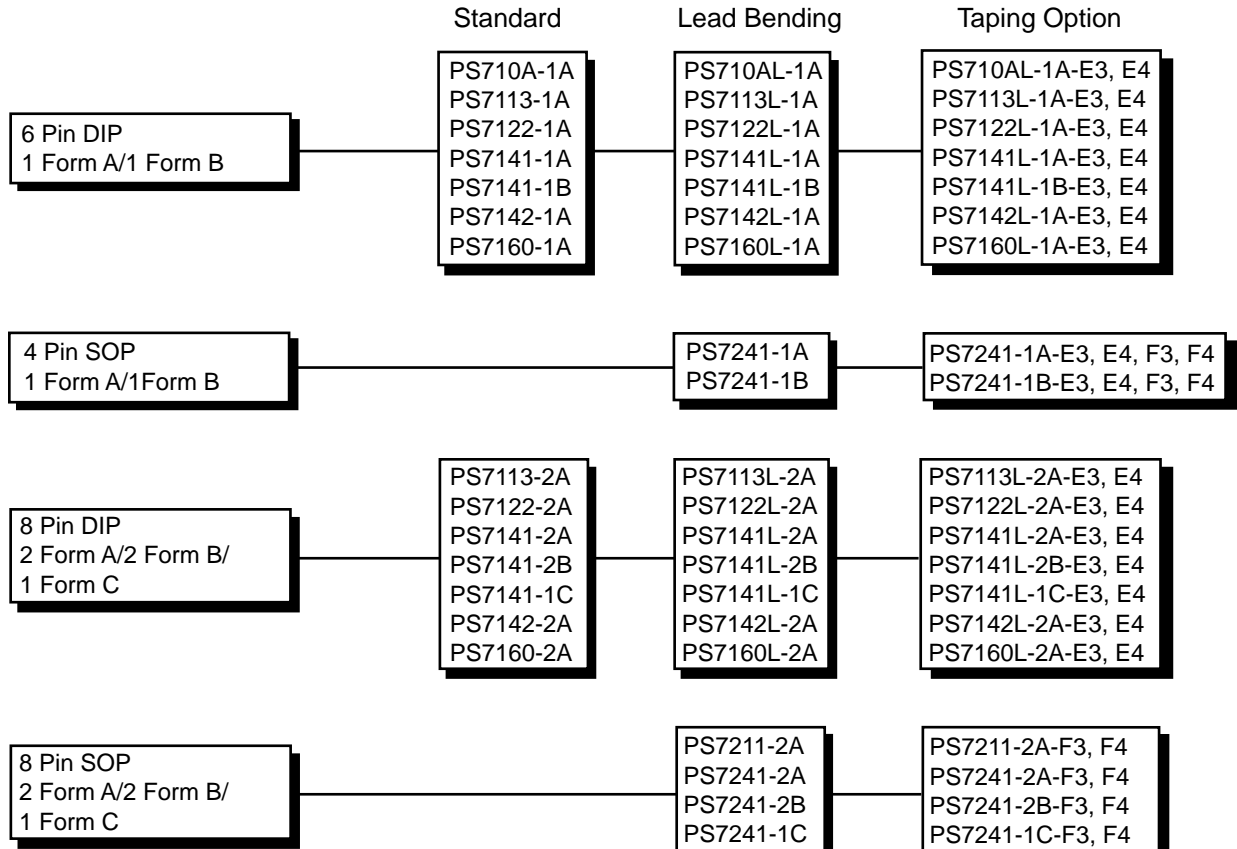


1. LED Anode
2. LED Cathode
3. Tr Collector
4. Tr Collector
5. LED Anode/Cathode
6. LED Anode/Cathode
7. MOSFET
8. MOSFET

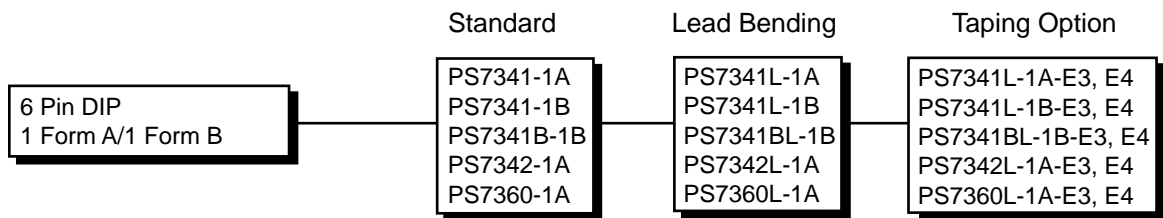
AC Hybrid: Optocoupler plus SSR

1 Form A in 8 pin SOP

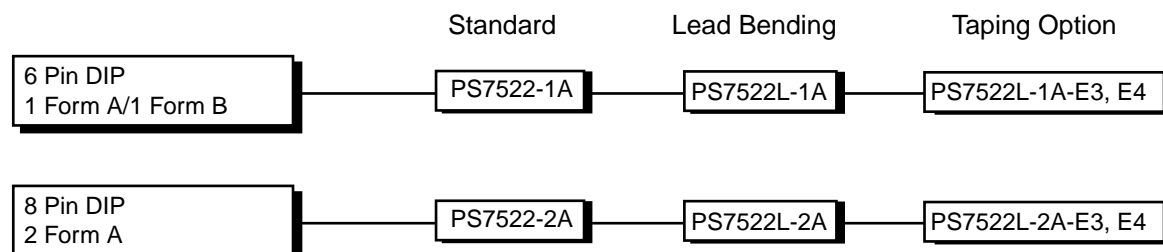
STANDARD



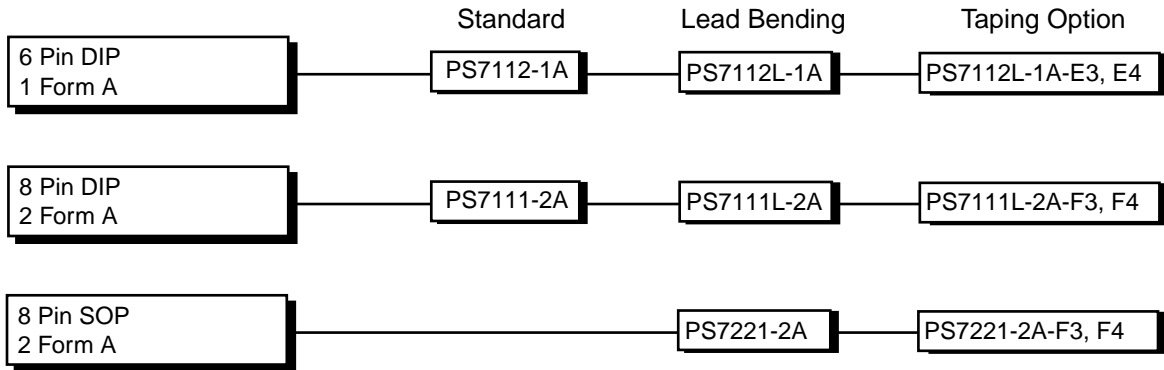
HIGH ISOLATION VOLTAGE



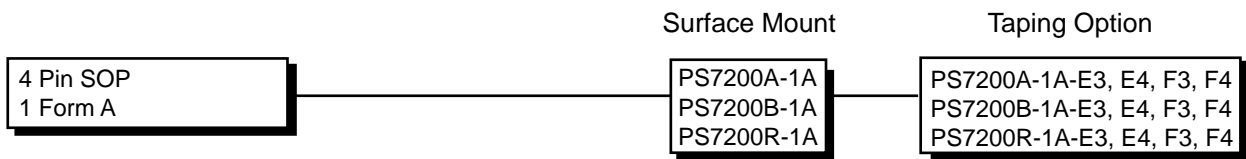
SLOW SWITCHING



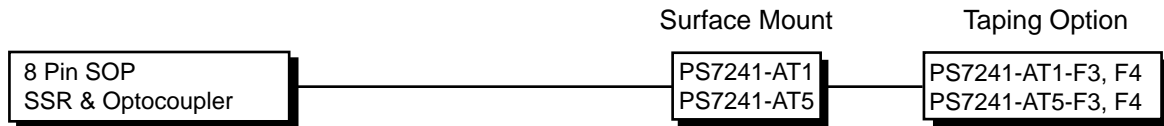
FAST SWITCHING



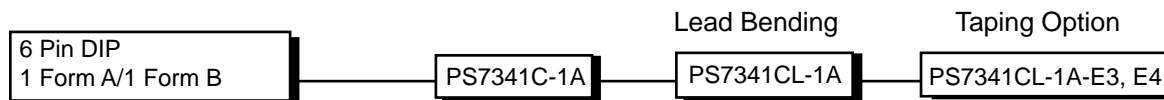
HIGH FREQUENCY RF



HYBRID



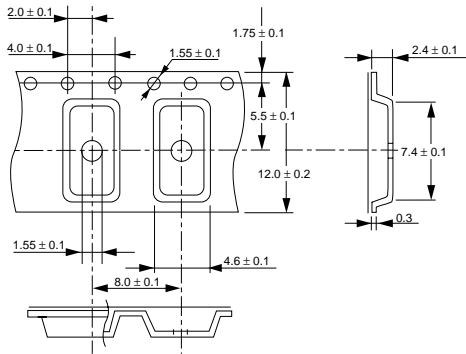
CURRENT LIMITING



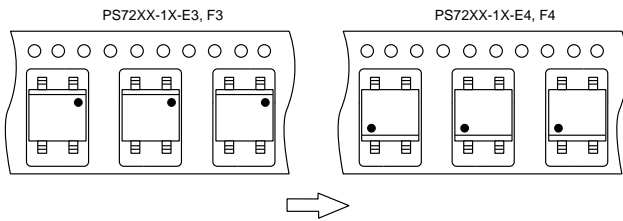
TAPING SPECIFICATIONS (Units in mm)

4 PIN SOP

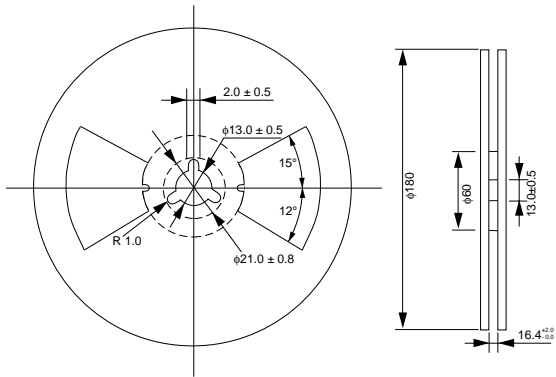
Outline and Dimensions (Tape)



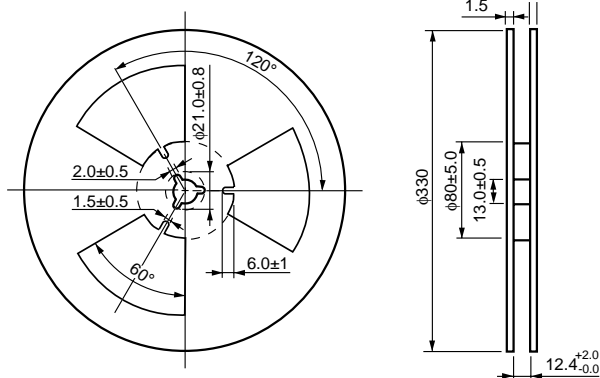
Taping Direction



Outline and Dimensions (Reel)



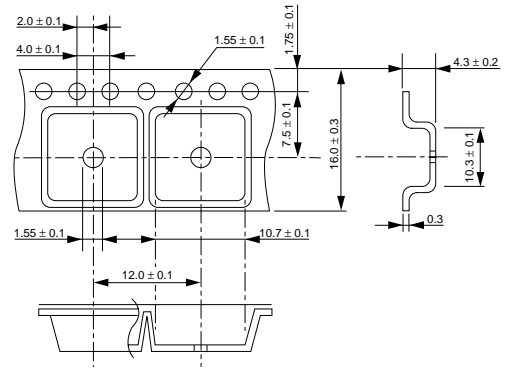
Packaging: E3/E4 900 pcs/reel



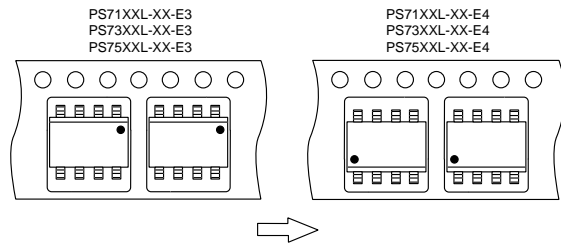
Packaging: E3/E4 3500 pcs/reel

6, 8 PIN DIP

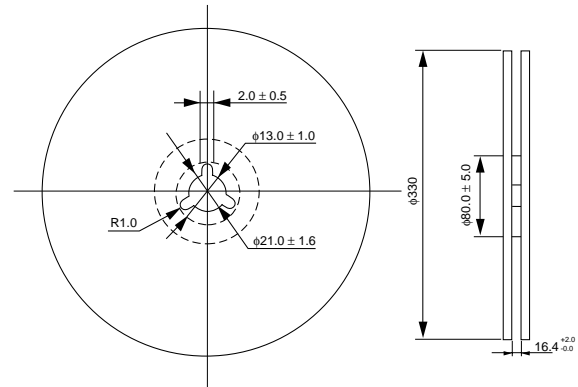
Outline and Dimensions (Tape)



Taping Direction



Outline and Dimensions (Reel)

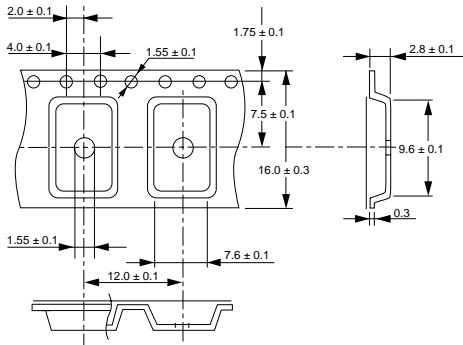


Packaging: 1000 pcs/reel

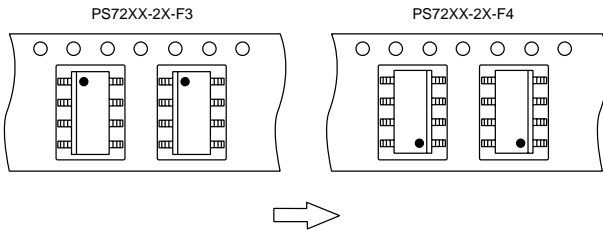
TAPING SPECIFICATIONS (Units in mm) *continued*

8 PIN SOP

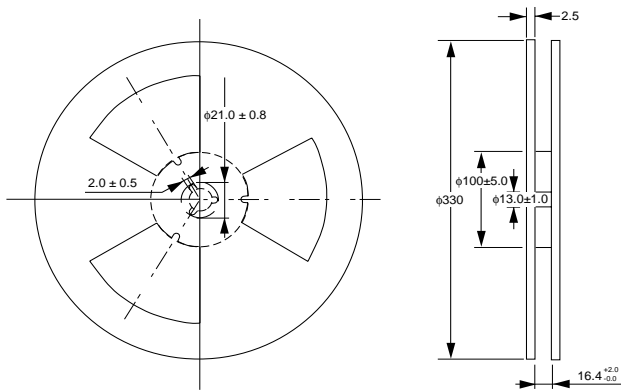
Outline and Dimensions (Tape)



Taping Direction



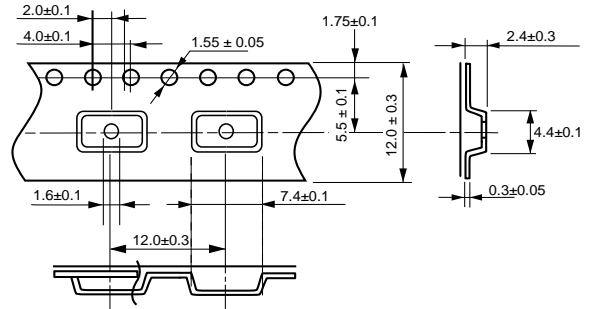
Outline and Dimensions (Reel)



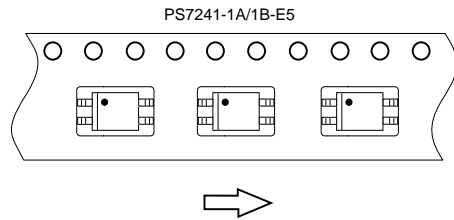
Packaging: 1500 pcs/reel

4 PIN SOP ($\phi 255$ Reel)

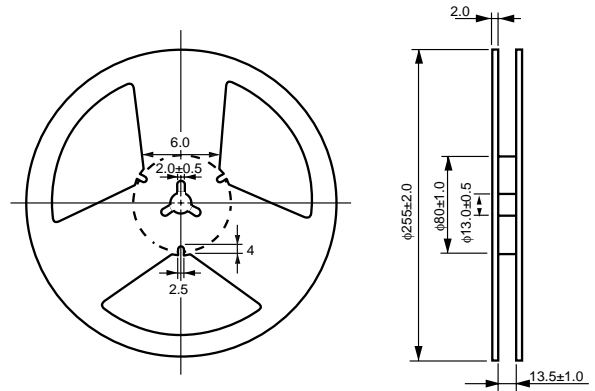
Outline and Dimensions (Tape)



Taping Direction

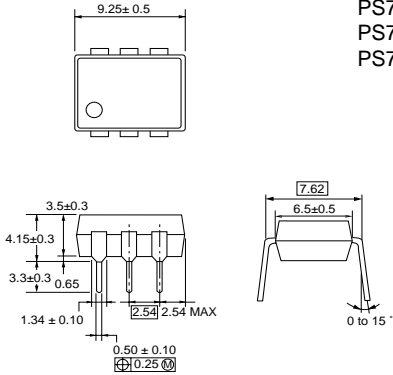
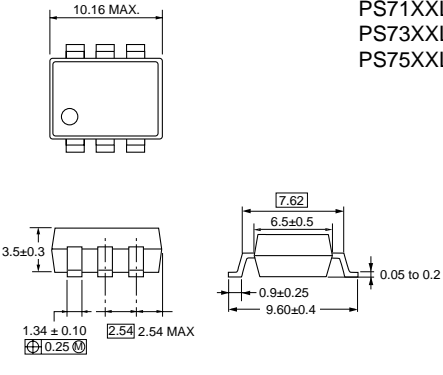
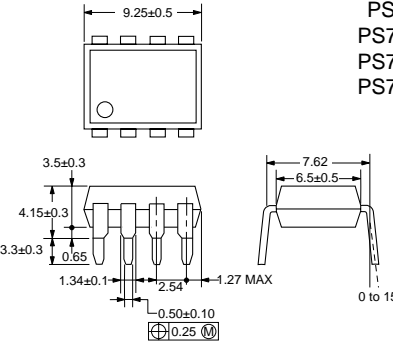
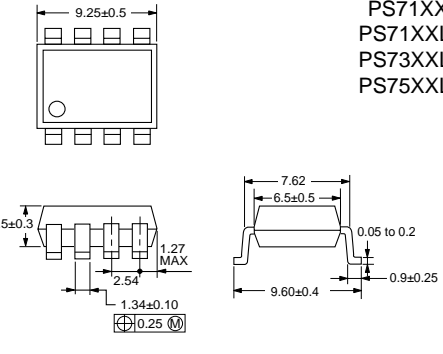
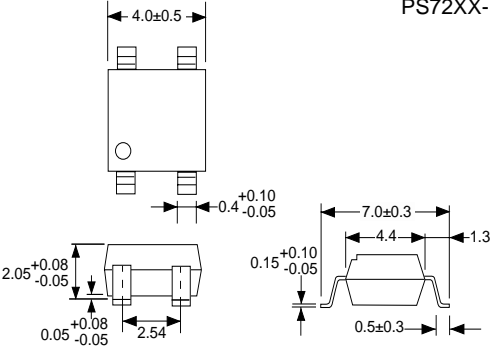
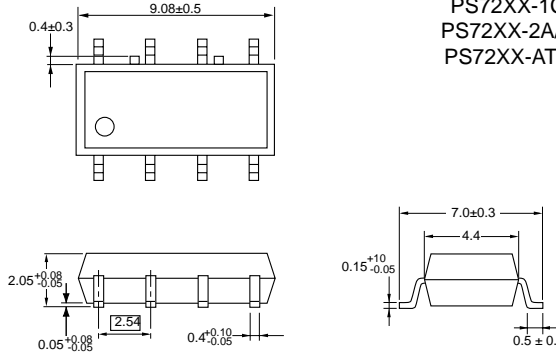
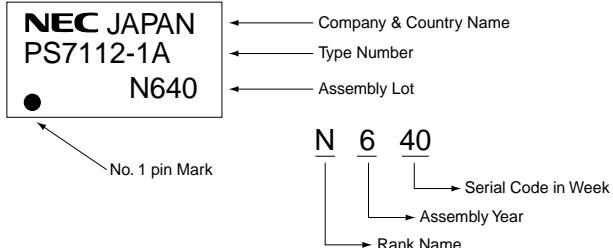


Outline and Dimensions (Reel)



Packaging: 1000 pcs/reel

SOLID STATE RELAYS PACKAGE DIAGRAMS (Units in mm)

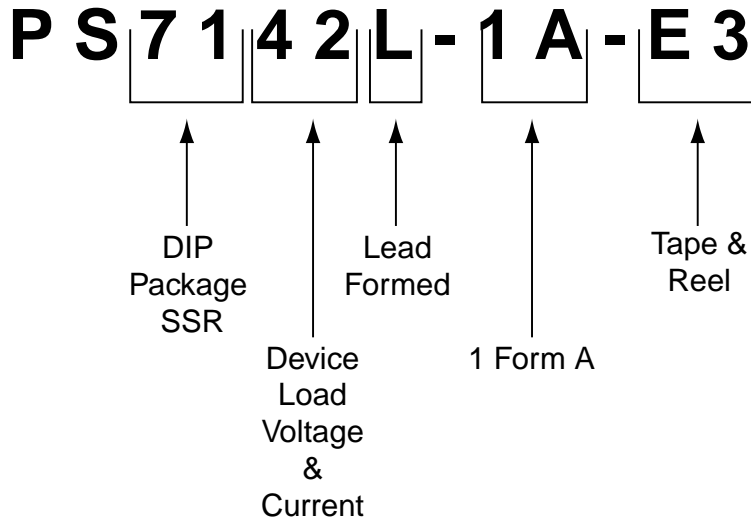
<p>6 PIN DIP</p>  <p>PS71XX-1A/B PS73XX-1A/B PS75XX-1A/B</p>	<p>6 PIN DIP - lead bending type</p>  <p>PS71XXL-1A/B PS73XXL-1A/B PS75XXL-1A/B</p>
<p>8 PIN DIP</p>  <p>PS71XX-1C PS71XX-2A/B PS73XX-2A/B PS75XX-2A/B</p>	<p>8 PIN DIP - lead bending type</p>  <p>PS71XXL-1C PS71XXL-2A/B PS73XXL-2A/B PS75XXL-2A/B</p>
<p>4 PIN SOP - lead bending type</p>  <p>PS72XX-1A/B</p>	<p>8 PIN SOP - lead bending type</p>  <p>PS72XX-1C PS72XX-2A/B PS72XX-ATX</p>
<p>MARKING</p>  <p>Company & Country Name Type Number Assembly Lot No. 1 pin Mark Serial Code in Week Assembly Year Rank Name</p>	

INTERNATIONAL SAFETY STANDARDS

SOLID STATE RELAYS PART NUMBERS				PS71XX-1A PS71XX-2A	PS710A-1A	PS71XX-1B PS71XX-2B PS71XX-1C	PS72XX-1A	PS72XX-2A	PS7241-AT1 PS7241-AT5	PS73XX-1A PS73XX-1A	PS75XX-1A PS75XX-2A
PS73XXC-1B											
PARAMETER (Units: mm) (Minimum Dist.)		Outer Creepage Distance		7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
		Clearance Distance		7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
		Isolation Distance		0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
		Inner Creepage Distance		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
		Breakdown Voltage		1.5 k	1.5 k	1.5 k	1.5 k	1.5 k	1.5 k	3.75 k	1.5 k
Organization	Country	Standard No	NEC Approval No.								
UL	USA	UL1577	E72422(S)	●	●	●	⊙	●	●	●	●
CSA	Canada	CL9073X0030	CA101391	⊙	●	⊙	⊙	●	●	●	●
VDE	Germany	VDE0884	See Right Table	⊙	●	⊙	●/⊙	●	●	●	●
BSI	UK	BS415 /EC55	7112 (4 pin) 7250 (6 pin)	●	●	●	●	●	●	●	●
		BS7002 /EC950	7240 (4 pin) 7615 (6 pin)	●	●	⊙	⊙	●	●	●	●
SEMKO	Sweden	SS-441-01-55	9317144	-	-	-	-	-	-	-	-
		SS-EN-60-950	9317144	-	-	-	-	-	-	-	-
SETI	Finland	E 65-89	167265-08	-	-	-	-	-	-	-	-
		SFS-EN-60-950	167265-08	-	-	-	-	-	-	-	-
NEMKO	Norway	NEK-HD 195 S6	A21409	-	-	-	-	-	-	-	-
		NEK-EN-60-950	A21409	-	-	-	-	-	-	-	-
DEMKO	Denmark	Section 101	300535	-	-	-	-	-	-	-	-
		Section 137	300535	-	-	-	-	-	-	-	-

● Approved ⊙ Under Application ○ Under Planning — N/A

TYPICAL PART NUMBER



EXCLUSIVE NORTH AMERICAN AGENT FOR **NEC** RF, MICROWAVE & OPTOELECTRONIC SEMICONDUCTORS
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12/12/2000

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