



## MOS RELAY EPR SERIES



DIP TYPE



SMD TYPE



SOP TYPE



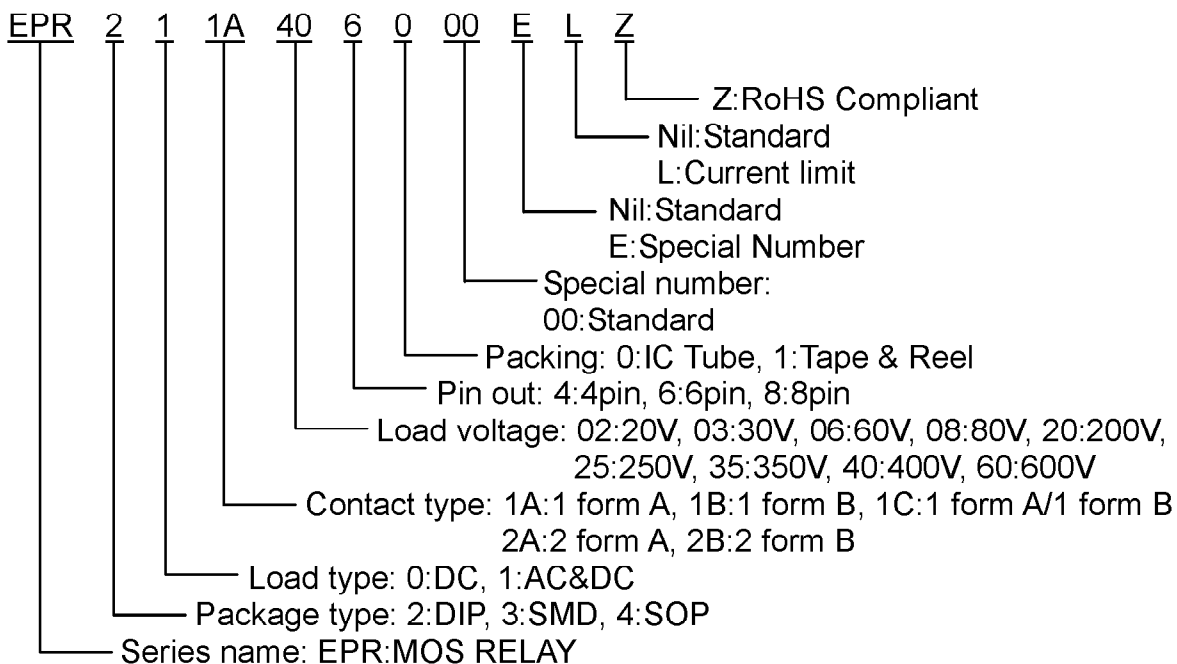
### FEATURES

- No EMI/RFI generation
- High reliability
- No moving parts
- Low drive power requirement (TTL/CMOS compatible)
- Low On-state resistance
- High isolation voltage
- Arc-free with no snubbing circuits
- Machine insertable or wave solderable

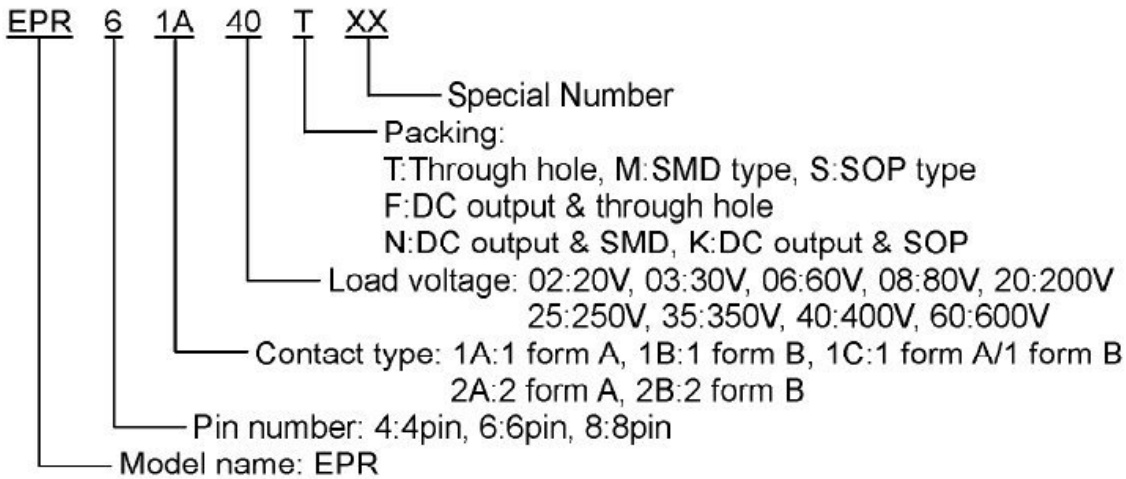
### APPLICATIONS

- Telecommunications
- Instrumentation
- Medical equipment
- Security
- Industrial control

### PART NUMBER SYSTEM

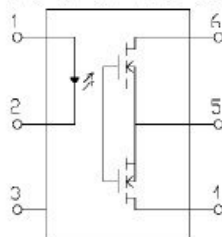


## MARKING SYSTEM

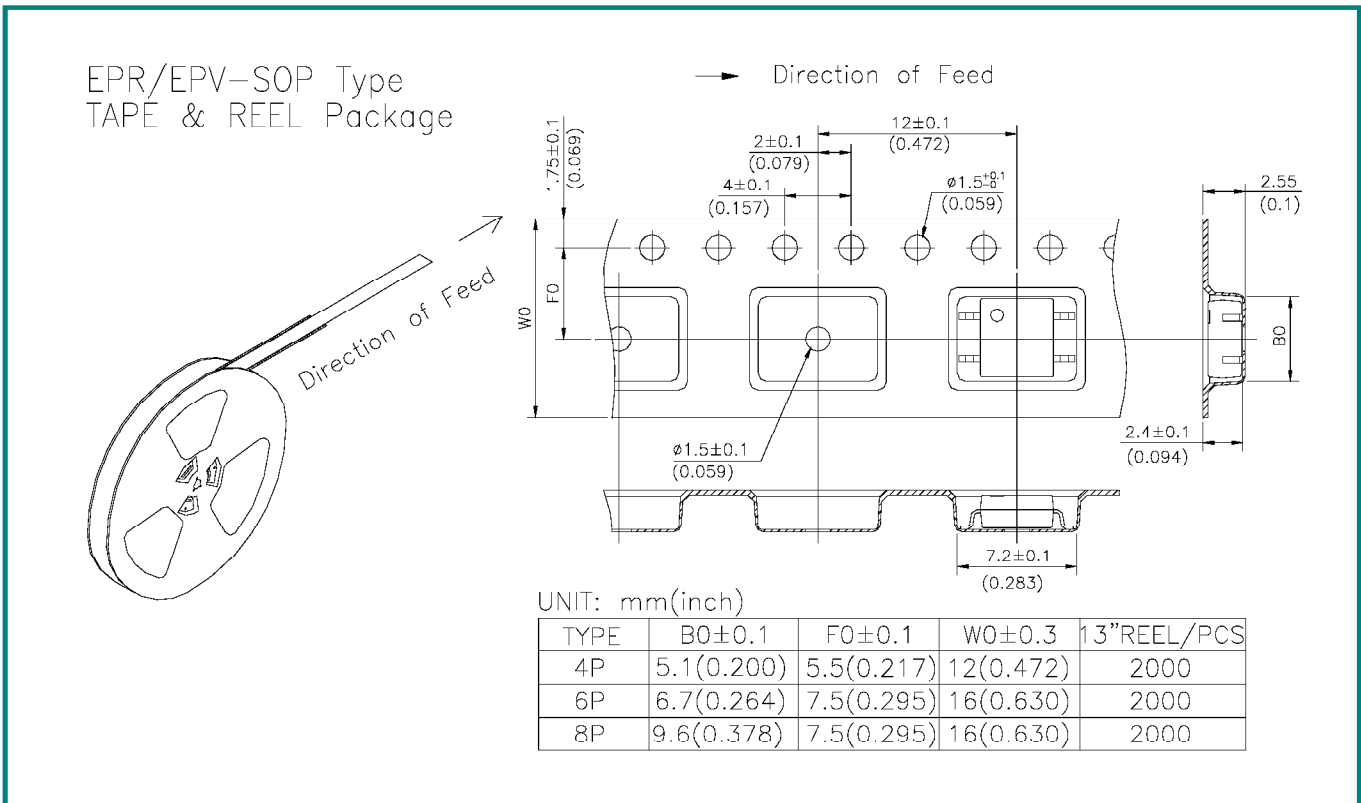
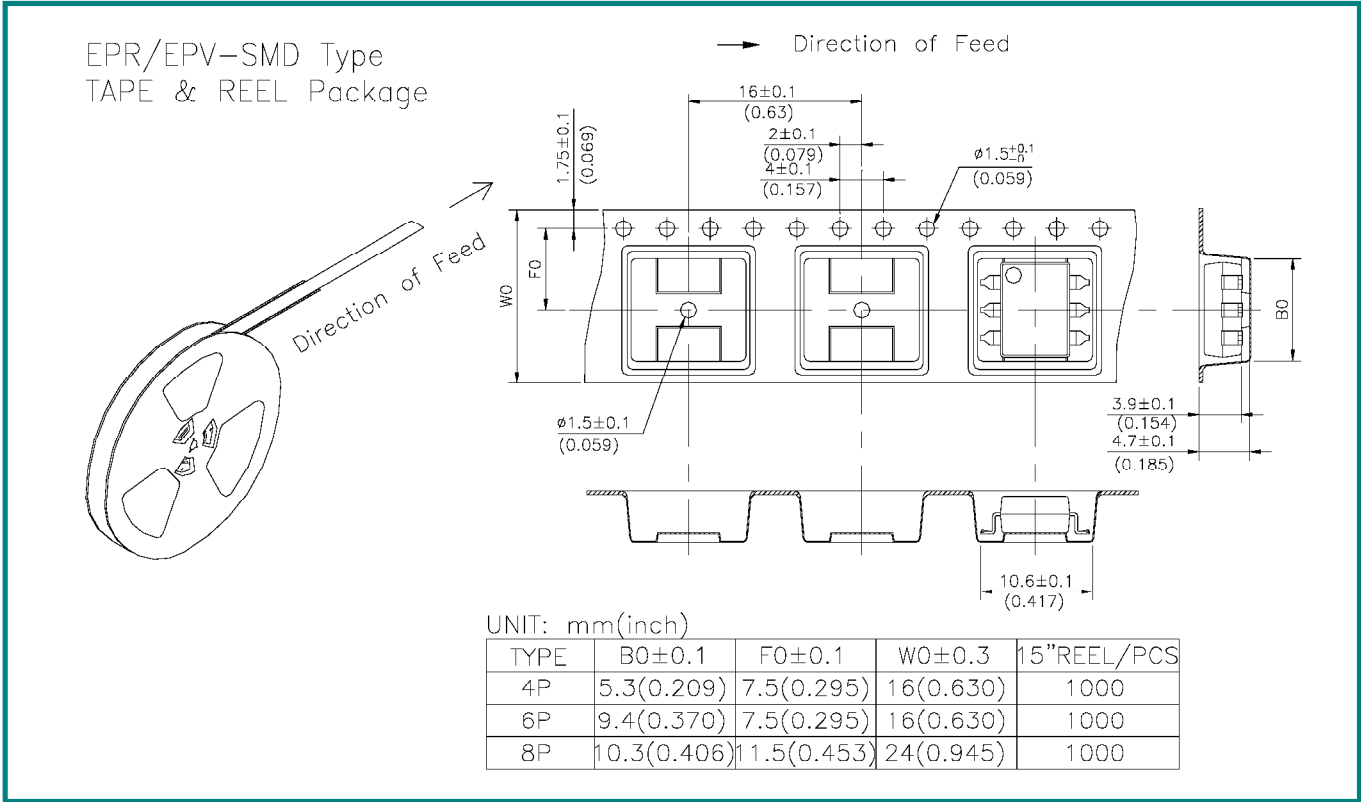


## CIRCUIT DIAGRAM

EPR 6P 1A TYPE (AC/DC)



**OPTIONS**

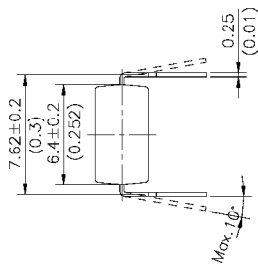
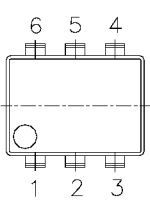




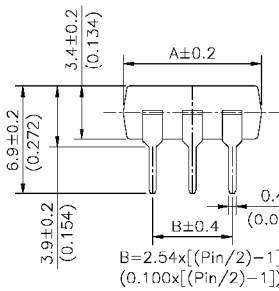
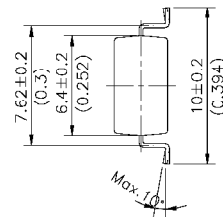
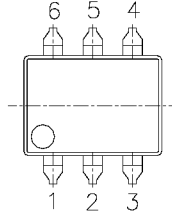
## DIMENSIONS

DIMENSIONS Unit:mm(inch)  
 EPR/EPV-DIP/SMD SERIES

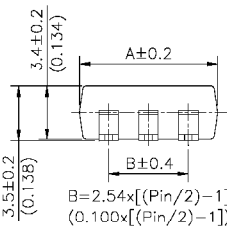
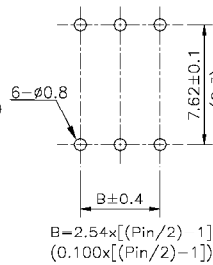
(DIP TYPE)



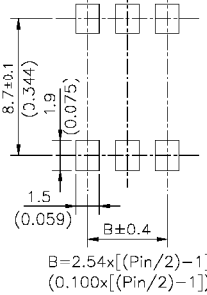
(SMD TYPE)



P.C.B. LAYOUT  
 (TOP VIEW)



P.C.B. LAYOUT  
 (TOP VIEW)



Pin out	Dimensions A
4 Pin	4.7(0.185)
6 Pin	8.8(0.346)
8 Pin	9.78(0.385)
Pin out	Dimensions B
4 Pin	2.54(0.100)
6 Pin	5.08(0.200)
8 Pin	7.62(0.300)

## ■ SPECIFICATIONS (@25°C):

Part Number (4 PIN) (6 PIN) (8 PIN)	DIP	EPR	211A024005	211A034005	211A064000	211A064001	211A064002
	SMD		211A026005	211A036005	211A066000	211A066001	211A066002
			212A028005	212A038005	212A068000	212A068001	212A068002
	SOP		311A024X05	311A034X05	311A064X00	311A064X01	311A064X02
			311A026X05	311A036X05	311A066X00	311A066X01	311A066X02
			312A028X05	312A038X05	312A068X00	312A068X01	312A068X02
			411A024X05	411A034X05	411A064X00	411A064X01	411A064X02
			411A026X05	411A036X05	411A066X00	411A066X01	411A066X02
			412A028X05	412A038X05	412A068X00	412A068X01	412A068X02
Contact form	4PIN / 6PIN		1A	1A	1A	1A	1A
	8PIN		2A	2A	2A	2A	2A
Input Characteristics							
Forward voltage (V)(V <sub>F</sub> )			0.9-1.5	0.9-1.5	0.9-1.5	0.9-1.5	0.9-1.5
Reverse voltage at 10μA (V)(V <sub>R</sub> )			5	5	5	5	5
Control current (mA)(I <sub>F</sub> )			10-50	10-50	5-50	5-50	5-50
Output Characteristics							
Load voltage (V)(AC peak or DC)(V <sub>L</sub> )			20	30	60	60	60
Continuous rated load current (mA)(I <sub>L</sub> )	SOP		1500	1300	350	120	120
	SMD/DIP		2000	1800	400	120	120
Peak current (mA)(I <sub>L-Peak</sub> )	SOP		2500	2000	600	250	250
	SMD/DIP		2500	2000	700	250	250
On-state resistance Max. (Ω)(R <sub>ON</sub> )			0.5	0.5	1.4	16	8
Off-state leakage current (μA) (I <sub>LK</sub> )			1	1	1	1	1
Turn-on (msec)(T <sub>ON</sub> )			5	5	1	1.5	1.5
Turn-off (msec)(T <sub>OFF</sub> )			2	2	1	1	1
Capacitance (pF)(C <sub>OUT</sub> )			400	300	150	25	25
Current limit typ. (mA)			---	---	---	---	---
Input / Output Characteristics							
I/O Capacitance (pF)(C <sub>I/O</sub> )			5	5	5	5	5
I/O Isolation voltage (VAC)(V <sub>IO</sub> )	SOP		1500	1500	1500	1500	1500
	SMD/DIP		3750	3750	3750	3750	3750
I/O Isolation resistance (GΩ)(R <sub>IO</sub> )			5	5	5	5	5
Temperature limits	Operating (T <sub>OP</sub> )	-40°C to +85°C (-40°F to +185°F)					
	Storage (T <sub>STG</sub> )	-40°C to +100°C (-40°F to +212°F)					



Part Number (4 PIN) (6 PIN) (8 PIN)	DIP	EPR	211A064005	211A064009	211A084000	211A084009	
	SMD		211A066005	211A066009	211A086000	211A086009	
			212A068005	212A068009	212A088000	212A088009	
SOP	311A064X05	311A064X09	311A084X00	311A084X09			
	311A066X05	311A066X09	311A086X00	311A086X09			
			312A068X05	312A068X09	312A088X00	312A088X09	
			-----	411A064X09	411A084X00	411A084X09	
			411A066X05	411A066X09	411A086X00	411A086X09	
			-----	412A068X09	412A088X00	412A088X09	
Contact form	4PIN / 6PIN		1A	1A	1A	1A	
	8PIN		2A	2A	2A	2A	
Input Characteristics							
Forward voltage (V)(V <sub>F</sub> )			0.9-1.5	0.9-1.5	0.9-1.5	0.9-1.5	
Reverse voltage at 10μA (V)(V <sub>R</sub> )			5	5	5	5	
Control current (mA)(I <sub>F</sub> )			10-50	5-50	5-50	5-50	
Output Characteristics							
Load voltage (V)(AC peak or DC)(V <sub>L</sub> )			60	60	80	80	
Continuous rated load current (mA)(I <sub>L</sub> )	SOP		900	350	120	120	
	SMD/DIP		1100	400	120	120	
Peak current (mA)(I <sub>LPeak</sub> )	SOP		1500	600	250	250	
	SMD/DIP		1500	700	250	250	
On-state resistance Max. (Ω)(R <sub>ON</sub> )			0.7	1.4	12	12	
Off-state leakage current (μA) (I <sub>LK</sub> )			1	1	1	1	
Turn-on (msec)(T <sub>ON</sub> )			5	1	1	1	
Turn-off (msec)(T <sub>OFF</sub> )			2	1	1	1	
Capacitance (pF)(C <sub>OUT</sub> )			300	150	25	25	
Current limit typ. (mA)			---	---	---	---	
Input / Output Characteristics							
I/O Capacitance (pF)(C <sub>I/O</sub> )			5	5	5	5	
I/O Isolation voltage (VAC)(V <sub>I/O</sub> )	SOP		1500	2500	1500	2500	
	SMD/DIP		3750	5000	3750	5000	
I/O Isolation resistance (GΩ)(R <sub>I/O</sub> )			5	5	5	5	
Temperature limits	Operating (T <sub>OP</sub> )	-40°C to +85°C (-40°F to +185°F)					
	Storage (T <sub>STG</sub> )	-40°C to +100°C (-40°F to +212°F)					



Part Number (4 PIN) (6 PIN) (8 PIN)	DIP	EPR	211A204000	211A204009	211A254000	211A254002	211A254009
	SMD		211A206000	211A206009	211A256000	211A256002	211A256009
			212A208000	212A208009	212A258000	212A258002	212A258009
SOP	311A204X00	311A204X09	311A254X00	311A254X02	311A254X09		
	311A206X00	311A206X09	311A256X00	311A256X02	311A256X09		
	312A208X00	312A208X09	312A258X00	312A258X02	312A258X09		
Contact form	4PIN / 6PIN	1A	1A	1A	1A	1A	
	8PIN	2A	2A	2A	2A	2A	
Input Characteristics							
Forward voltage (V)(V <sub>F</sub> )			0.9-1.5	0.9-1.5	0.9-1.5	0.9-1.5	0.9-1.5
Reverse voltage at 10μA (V)(V <sub>R</sub> )			5	5	5	5	5
Control current (mA)(I <sub>F</sub> )			5-50	5-50	5-50	5-50	5-50
Output Characteristics							
Load voltage (V)(AC peak or DC)(V <sub>L</sub> )			200	200	250	250	250
Continuous rated load current (mA)(I <sub>L</sub> )	SOP		150	150	140	140	140
	SMD/DIP		200	200	180	200	180
Peak current (mA)(I <sub>L-Peak</sub> )	SOP		300	300	300	300	300
	SMD/DIP		400	400	350	350	350
On-state resistance Max. (Ω)(R <sub>ON</sub> )			10	10	10	8	10
Off-state leakage current (μA) (I <sub>LK</sub> )			1	1	1	1	1
Turn-on (msec)(T <sub>ON</sub> )			1	1	1	1	1
Turn-off (msec)(T <sub>OFF</sub> )			1	1	1	1	1
Capacitance (pF)(C <sub>OUT</sub> )			100	100	100	---	100
Current limit typ. (mA)			---	---	---	---	---
Input / Output Characteristics							
I/O Capacitance (pF)(C <sub>I/O</sub> )			5	5	5	5	5
I/O Isolation voltage (VAC)(V <sub>I/O</sub> )	SOP		1500	2500	1500	1500	2500
	SMD/DIP		3750	5000	3750	3750	5000
I/O Isolation resistance (GΩ)(R <sub>I/O</sub> )			5	5	5	5	5
Temperature limits	Operating (T <sub>OP</sub> )	-40°C to +85°C (-40°F to +185°F)					
	Storage (T <sub>STG</sub> )	-40°C to +100°C (-40°F to +212°F)					

Part Number (4 PIN) (6 PIN) (8 PIN)	DIP	EPR	211A354000	211A354001	211A354002	211A354009	
	SMD		211A356000	211A356001	211A356002	211A356009	
			212A358000	212A358001	212A358002	212A358009	
SOP	EPR	311A354X00	311A354X01	311A354X02	311A354X09		
		311A356X00	311A356X01	311A356X02	311A356X09		
		312A358X00	312A358X01	312A358X02	312A358X09		
Contact form	4PIN / 6PIN		1A	1A	1A	1A	
	8PIN		2A	2A	2A	2A	
Input Characteristics							
Forward voltage (V)(V <sub>F</sub> )			0.9-1.5	0.9-1.5	0.9-1.5	0.9-1.5	
Reverse voltage at 10μA (V)(V <sub>R</sub> )			5	5	5	5	
Control current (mA)(I <sub>F</sub> )			5-50	5-50	5-50	5-50	
Output Characteristics							
Load voltage (V)(AC peak or DC)(V <sub>L</sub> )			350	350	350	350	
Continuous rated load current (mA)(I <sub>L</sub> )	SOP		100	80	130	100	
	SMD/DIP		130	100	170	130	
Peak current (mA)(I <sub>LPeak</sub> )	SOP		300	200	300	300	
	SMD/DIP		300	250	300	300	
On-state resistance Max. (Ω)(R <sub>ON</sub> )			10	50	16	30	
Off-state leakage current (μA) (I <sub>LK</sub> )			1	1	1	1	
Turn-on (msec)(T <sub>ON</sub> )			1	1.5	1	1	
Turn-off (msec)(T <sub>OFF</sub> )			1	1	1	1	
Capacitance (pF)(C <sub>OUT</sub> )			100	---	200	---	
Current limit typ. (mA)			---	---	---	---	
Input / Output Characteristics							
I/O Capacitance (pF)(C <sub>I/O</sub> )			5	5	5	5	
I/O Isolation voltage (VAC)(V <sub>I/O</sub> )	SOP		1500	1500	1500	2500	
	SMD/DIP		3750	3750	3750	5000	
I/O Isolation resistance (GΩ)(R <sub>I/O</sub> )			5	5	5	5	
Temperature limits	Operating (T <sub>OP</sub> )	-40°C to +85°C (-40°F to +185°F)					
	Storage (T <sub>STG</sub> )	-40°C to +100°C (-40°F to +212°F)					





Part Number (4 PIN) (6 PIN) (8 PIN)	DIP	EPR	211A404000	211A404002	211A404009	211A604000	211A604009
			211A406000	211A406002	211A406009	211A606000	211A606009
			212A408000	212A408002	212A408009	212A608000	212A608009
	SMD		311A404X00	311A404X02	311A404X09	311A604X00	311A604X09
			311A406X00	311A406X02	311A406X09	311A606X00	311A606X09
			312A408X00	312A408X02	312A408X09	312A608X00	312A608X09
	SOP		411A404X00	411A404X02	411A404X09	411A604X00	411A604X09
			411A406X00	411A406X02	411A406X09	411A606X00	411A606X09
			412A408X00	412A408X02	412A408X09	412A608X00	412A608X09
Contact form	4PIN / 6PIN		1A	1A	1A	1A	1A
	8PIN		2A	2A	2A	2A	2A
Input Characteristics							
Forward voltage (V)(V <sub>F</sub> )			0.9-1.5	0.9-1.5	0.9-1.5	0.9-1.5	0.9-1.5
Reverse voltage at 10 $\mu$ A (V)(V <sub>R</sub> )			5	5	5	5	5
Control current (mA)(I <sub>F</sub> )			5-50	5-50	5-50	5-50	5-50
Output Characteristics							
Load voltage (V)(AC peak or DC)(V <sub>L</sub> )			400	400	400	600	600
Continuous rated load current (mA)(I <sub>L</sub> )	SOP		100	120	100	50	50
	SMD/DIP		130	150	130	70	70
Peak current (mA)(I <sub>L-Peak</sub> )	SOP		250	300	250	100	100
	SMD/DIP		300	300	300	120	120
On-state resistance Max. ( $\Omega$ )(R <sub>ON</sub> )			30	16	30	60	60
Off-state leakage current ( $\mu$ A)(I <sub>LK</sub> )			1	1	1	1	1
Turn-on (msec)(T <sub>ON</sub> )			1	1	1	1	1
Turn-off (msec)(T <sub>OFF</sub> )			1	1	1	1	1
Capacitance (pF)(C <sub>OUT</sub> )			70	---	70	100	100
Current limit typ. (mA)			---	---	---	---	---
Input / Output Characteristics							
I/O Capacitance (pF)(C <sub>I/O</sub> )			5	5	5	5	5
I/O Isolation voltage (VAC)(V <sub>I/O</sub> )	SOP		1500	1500	2500	1500	2500
	SMD/DIP		3750	3750	5000	3750	5000
I/O Isolation resistance (G $\Omega$ )(R <sub>I/O</sub> )			5	5	5	5	5
Temperature limits	Operating (T <sub>OP</sub> )		-40°C to +85°C (-40°F to +185°F)				
	Storage (T <sub>STG</sub> )		-40°C to +100°C (-40°F to +212°F)				

Part Number (4 PIN) (6 PIN) (8 PIN)	DIP	EPR	211B064000	211B064009	211B204000	211B204009
	SMD		211B066000	211B066009	211B206000	211B206009
			212B068000	212B068009	212B208000	212B208009
SOP	311B064X00	311B064X09	311B204X00	311B204X09		
	311B066X00	311B066X09	311B206X00	311B206X09		
	312B068X00	312B068X09	312B208X00	312B208X09		
411B064X00	411B064X09	411B204X00	411B204X09			
	411B066X00	411B206X00	411B206X09			
	412B068X00	412B208X00	412B208X09			
Contact form	4PIN / 6PIN	1B	1B	1B	1B	
	8PIN	2B	2B	2B	2B	
Input Characteristics						
Forward voltage (V)(V <sub>F</sub> )		0.9-1.5	0.9-1.5	0.9-1.5	0.9-1.5	
Reverse voltage at 10μA (V)(V <sub>R</sub> )		5	5	5	5	
Control current (mA)(I <sub>F</sub> )		5-50	5-50	5-50	5-50	
Output Characteristics						
Load voltage (V)(AC peak or DC)(V <sub>L</sub> )		60	60	200	200	
Continuous rated load current (mA)(I <sub>L</sub> )	SOP	100	100	80	80	
	SMD/DIP	100	100	100	100	
Peak current (mA)(I <sub>L-Peak</sub> )	SOP	250	250	200	200	
	SMD/DIP	300	300	250	250	
On-state resistance Max. (Ω)(R <sub>ON</sub> )		6	6	30	30	
Off-state leakage current (μA) (I <sub>LK</sub> )		10	10	10	10	
Turn-on (msec)(T <sub>ON</sub> )		1	1	1	1	
Turn-off (msec)(T <sub>OFF</sub> )		1	1	1	1	
Capacitance (pF)(C <sub>OUT</sub> )		---	---	200	200	
Current limit typ. (mA)		---	---	---	---	
Input / Output Characteristics						
I/O Capacitance (pF)(C <sub>I/O</sub> )		5	5	5	5	
I/O Isolation voltage (VAC)(V <sub>I/O</sub> )	SOP	1500	2500	1500	2500	
	SMD/DIP	3750	5000	3750	5000	
I/O Isolation resistance (GΩ)(R <sub>I/O</sub> )		5	5	5	5	
Temperature limits	Operating (T <sub>OP</sub> )	-40°C to +85°C (-40°F to +185°F)				
	Storage (T <sub>STG</sub> )	-40°C to +100°C (-40°F to +212°F)				



Part Number (4 PIN) (6 PIN) (8 PIN)	DIP	EPR	211B354000 211B356X00 212B358X00	211B354009 211B356X09 212B358X09	211B404000 211B406X00 212B408X00	211B404009 211B406X09 212B408X09
	SMD		311B354000 311B356X00 312B358X00	311B354009 311B356X09 312B358X09	311B404000 311B406X00 312B408X00	311B404009 311B406X09 312B408X09
	SOP		411B354000 411B356X00 412B358X00	411B354009 411B356X09 412B358X09	411B404000 411B406X00 412B408X00	411B404009 411B406X09 412B408X09
Contact form	4PIN / 6PIN		1B	1B	1B	1B
	8PIN		2B	2B	2B	2B
Input Characteristics						
Forward voltage (V)(V <sub>F</sub> )			0.9-1.5	0.9-1.5	0.9-1.5	0.9-1.5
Reverse voltage at 10μA (V)(V <sub>R</sub> )			5	5	5	5
Control current (mA)(I <sub>F</sub> )			5-50	5-50	5-50	5-50
Output Characteristics						
Load voltage (V)(AC peak or DC)(V <sub>L</sub> )			350	350	400	400
Continuous rated load current (mA)(I <sub>L</sub> )	SOP		80	80	80	80
	SMD/DIP		100	100	100	100
Peak current (mA)(I <sub>L-Peak</sub> )	SOP		200	200	200	200
	SMD/DIP		250	250	250	250
On-state resistance Max. (Ω)(R <sub>ON</sub> )			50	50	50	50
Off-state leakage current (μA) (I <sub>LK</sub> )			10	10	10	10
Turn-on (msec)(T <sub>ON</sub> )			1	1	1	1
Turn-off (msec)(T <sub>OFF</sub> )			1	1	1	1
Capacitance (pF)(C <sub>OUT</sub> )			200	200	200	200
Current limit typ. (mA)			---	---	---	---
Input / Output Characteristics						
I/O Capacitance (pF)(C <sub>I/O</sub> )			5	5	5	5
I/O Isolation voltage (VAC)(V <sub>I/O</sub> )	SOP		1500	2500	1500	2500
	SMD/DIP		3750	5000	3750	5000
I/O Isolation resistance (GΩ)(R <sub>I/O</sub> )			5	5	5	5
Temperature limits	Operating (T <sub>OP</sub> )		-40°C to +85°C (-40°F to +185°F)			
	Storage (T <sub>STG</sub> )		-40°C to +100°C (-40°F to +212°F)			

Part Number (4 PIN) (6 PIN) (8 PIN)	DIP	EPR	----- 211C068000		----- 211C068009		----- 211C208000		----- 211C208009	
	SMD		----- 311C068X00		----- 311C068X09		----- 311C208X00		----- 311C208X09	
	SOP		----- 411C068X00		----- 411C068X09		----- 411C208X00		----- 411C208X09	
Contact form	4PIN / 6PIN	---		---		---		---		
	8PIN	1A	1B	1A	1B	1A	1B	1A	1B	
Input Characteristics										
Forward voltage (V)(V <sub>F</sub> )		0.9-1.5		0.9-1.5		0.9-1.5		0.9-1.5		
Reverse voltage at 10μA (V)(V <sub>R</sub> )		5		5		5		5		
Control current (mA)(I <sub>F</sub> )		5-50		5-50		5-50		5-50		
Output Characteristics										
Load voltage (V)(AC peak or DC)(V <sub>L</sub> )		60	60	60	60	200	200	200	200	
Continuous rated load current (mA)(I <sub>L</sub> )	SOP	350	100	350	100	150	80	150	80	
	SMD/DIP	400	100	400	100	200	100	200	100	
Peak current (mA)(I <sub>L-Peak</sub> )	SOP	600	250	600	250	300	200	300	200	
	SMD/DIP	700	300	700	300	400	250	400	250	
On-state resistance Max. (Ω)(R <sub>ON</sub> )		1.4	6	1.4	6	10	30	10	30	
Off-state leakage current (μA) (I <sub>LK</sub> )		1	10	1	10	1	10	1	10	
Turn-on (msec)(T <sub>ON</sub> )		1	1	1	1	1	1	1	1	
Turn-off (msec)(T <sub>OFF</sub> )		1	1	1	1	1	1	1	1	
Capacitance (pF)(C <sub>OUT</sub> )		150	---	150	---	100	200	100	200	
Current limit typ. (mA)		---	---	---	---	---	---	---	---	
Input / Output Characteristics										
I/O Capacitance (pF)(C <sub>I/O</sub> )		5		5		5		5		
I/O Isolation voltage (VAC)(V <sub>I/O</sub> )	SOP	1500		2500		1500		2500		
	SMD/DIP	3750		5000		3750		5000		
I/O Isolation resistance (GΩ)(R <sub>I/O</sub> )		5		5		5		5		
Temperature limits	Operating (T <sub>OP</sub> )	-40°C to +85°C (-40°F to +185°F)								
	Storage (T <sub>STG</sub> )	-40°C to +100°C (-40°F to +212°F)								

Part Number (4 PIN) (6 PIN) (8 PIN)	DIP	----- 211C358000		----- 211C358009		----- 211C408000		----- 211C408009	
	SMD	----- 311C358X00		----- 311C358X09		----- 311C408X00		----- 311C408X09	
	SOP	----- 411C358X00		----- 411C358X09		----- 411C408X00		----- 411C408X09	
Contact form	4PIN / 6PIN	---		---		---		---	
	8PIN	1A	1B	1A	1B	1A	1B	1A	1B
Input Characteristics									
Forward voltage (V)(V <sub>F</sub> )		0.9-1.5		0.9-1.5		0.9-1.5		0.9-1.5	
Reverse voltage at 10μA (V)(V <sub>R</sub> )		5		5		5		5	
Control current (mA)(I <sub>F</sub> )		5-50		5-50		5-50		5-50	
Output Characteristics									
Load voltage (V)(AC peak or DC)(V <sub>L</sub> )		350	350	350	350	400	400	400	400
Continuous rated load current (mA)(I <sub>L</sub> )	SOP	100	80	100	80	100	80	100	80
	SMD/DIP	130	100	130	100	130	100	130	100
Peak current (mA)(I <sub>LPeak</sub> )	SOP	300	200	300	200	250	250	250	250
	SMD/DIP	300	250	300	250	300	250	300	250
On-state resistance Max. (Ω)(R <sub>ON</sub> )		30	50	30	50	30	50	30	50
Off-state leakage current (μA) (I <sub>LK</sub> )		1	10	1	10	1	10	1	10
Turn-on (msec)(T <sub>ON</sub> )		1	1	1	1	1	1	1	1
Turn-off (msec)(T <sub>OFF</sub> )		1	1	1	1	1	1	1	1
Capacitance (pF)(C <sub>OUT</sub> )		---	200	---	200	70	150	70	150
Current limit typ. (mA)		---	---	---	---	---	---	---	---
Input / Output Characteristics									
I/O Capacitance (pF)(C <sub>I/O</sub> )		5		5		5		5	
I/O Isolation voltage (VAC)(V <sub>I/O</sub> )	SOP	1500		2500		1500		2500	
	SMD/DIP	3750		5000		3750		5000	
I/O Isolation resistance (GΩ)(R <sub>I/O</sub> )		5		5		5		5	
Temperature limits	Operating (T <sub>OP</sub> )	-40°C to +85°C (-40°F to +185°F)							
	Storage (T <sub>STG</sub> )	-40°C to +100°C (-40°F to +212°F)							

Part Number (4 PIN) (6 PIN) (8 PIN)	DIP	EPR	211A354000L 311A354000L 412A354000L	211A354001L 311A354001L 412A354001L	211A354002L 311A354002L 412A354002L	211A404000L 311A404000L 412A404000L	211A404002L 311A404002L 412A404002L
	SMD		211A356X00L 311A356X00L 412A356X00L	211A356X01L 311A356X01L 412A356X01L	211A356X02L 311A356X02L 412A356X02L	211A406X00L 311A406X00L 412A406X00L	211A406X02L 311A406X02L 412A406X02L
	SOP		211A358X00L 311A358X00L 412A358X00L	211A358X01L 311A358X01L 412A358X01L	211A358X02L 311A358X02L 412A358X02L	211A408X00L 311A408X00L 412A408X00L	211A408X02L 311A408X02L 412A408X02L
Contact form	4PIN / 6PIN		1A	1A	1A	1A	1A
	8PIN		2A	2A	2A	2A	2A
Input Characteristics							
Forward voltage (V)(V <sub>F</sub> )			0.9-1.5	0.9-1.5	0.9-1.5	0.9-1.5	0.9-1.5
Reverse voltage at 10μA (V)(V <sub>R</sub> )			5	5	5	5	5
Control current (mA)(I <sub>F</sub> )			5-50	5-50	5-50	5-50	5-50
Output Characteristics							
Load voltage (V)(AC peak or DC)(V <sub>L</sub> )			350	350	350	400	400
Continuous rated load current (mA)(I <sub>L</sub> )	SOP		100	80	120	100	100
	SMD/DIP		120	100	120	120	120
Peak current (mA)(I <sub>LPeak</sub> )	SOP		120	120	120	120	120
	SMD/DIP		120	120	120	120	120
On-state resistance Max. (Ω)(R <sub>ON</sub> )			35	55	22	40	22
Off-state leakage current (μA) (I <sub>LK</sub> )			1	1	1	1	1
Turn-on (msec)(T <sub>ON</sub> )			3	3	3	3	3
Turn-off (msec)(T <sub>OFF</sub> )			1	1	1	1	1
Capacitance (pF)(C <sub>OUT</sub> )			---	---	---	70	---
Current limit typ. (mA)			180	180	180	180	180
Input / Output Characteristics							
I/O Capacitance (pF)(C <sub>I/O</sub> )			5	5	5	5	5
I/O Isolation voltage (VAC)(V <sub>I/O</sub> )	SOP		1500	1500	1500	1500	1500
	SMD/DIP		3750	3750	3750	3750	3750
I/O Isolation resistance (GΩ)(R <sub>I/O</sub> )			5	5	5	5	5
Temperature limits	Operating (T <sub>OP</sub> )	-40°C to +85°C (-40°F to +185°F)					
	Storage (T <sub>STG</sub> )	-40°C to +100°C (-40°F to +212°F)					