



MOS RELAY EPR SERIES

 E236930,
  E155181(R)

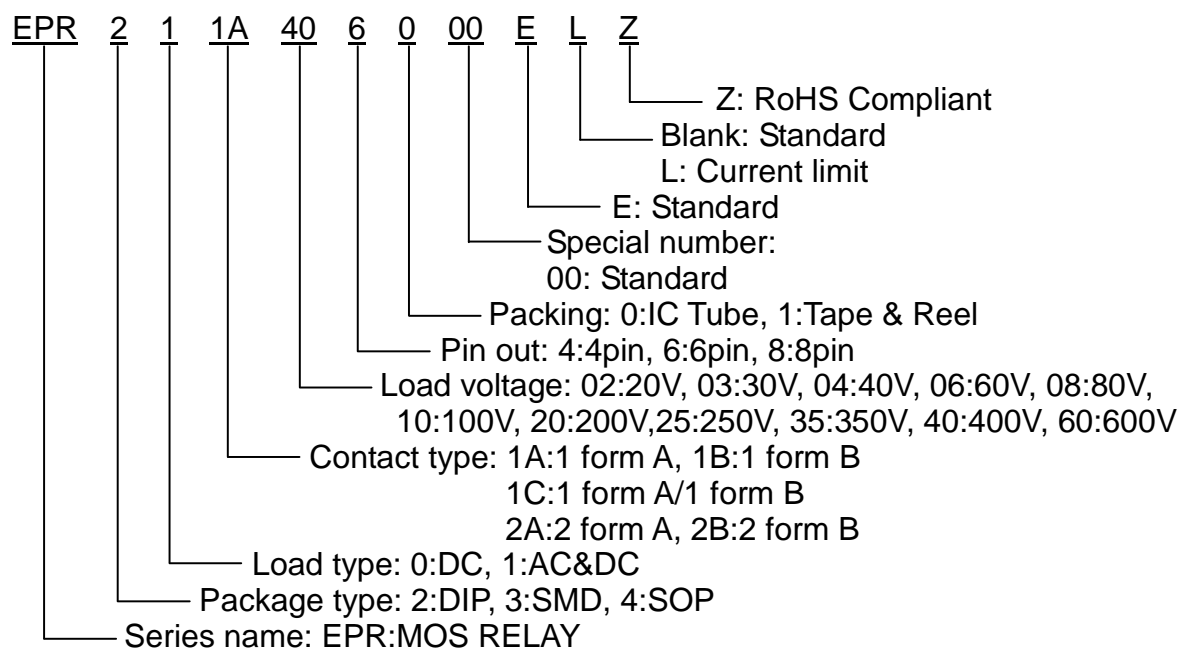
FEATURES

- 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



DIP TYPE



SMD TYPE

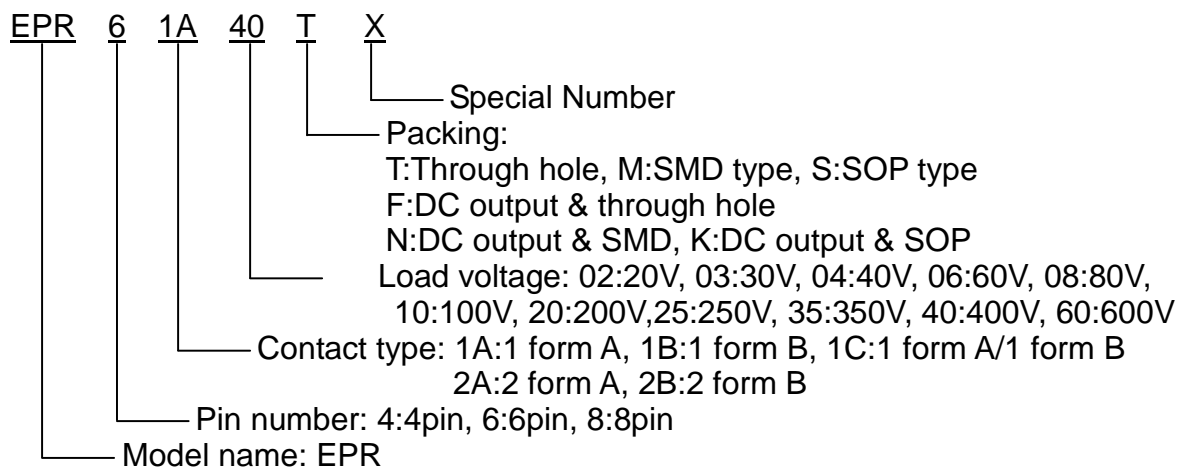


SOP TYPE

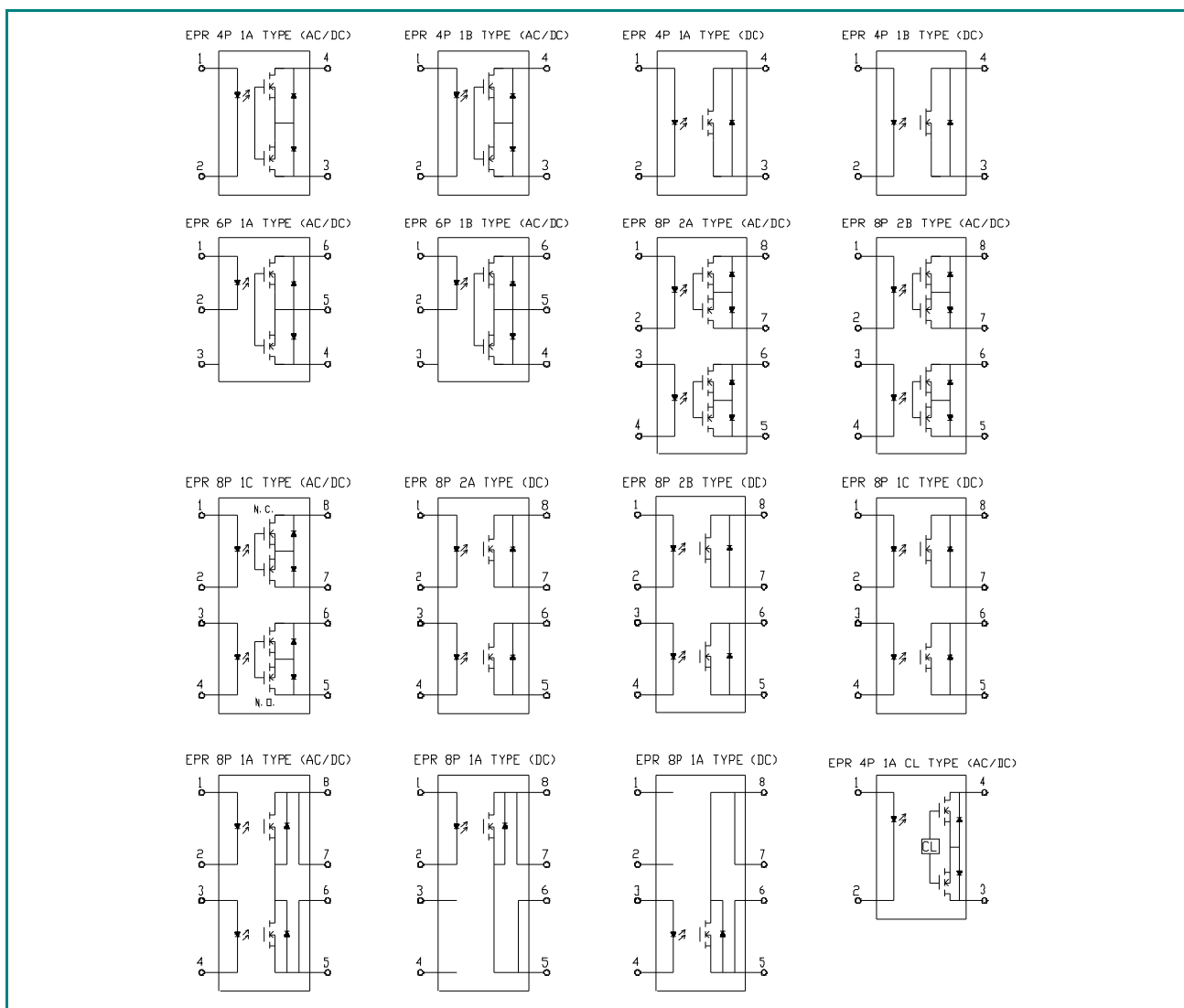




MARKING SYSTEM



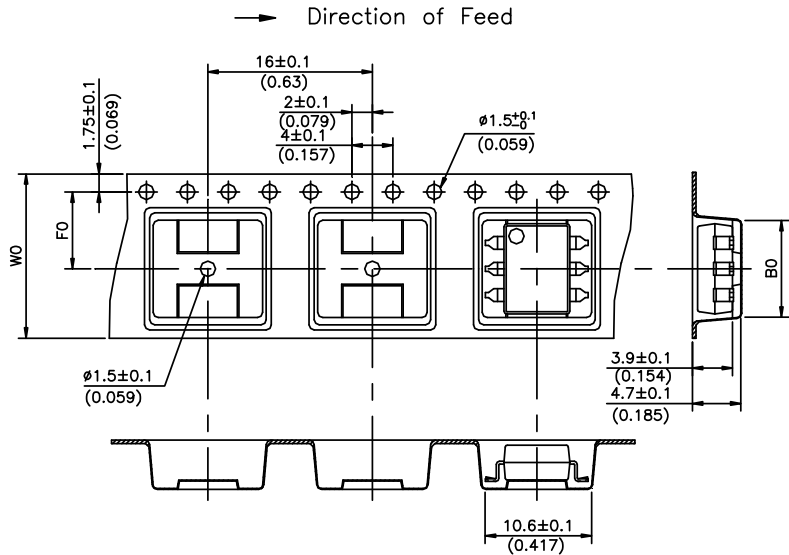
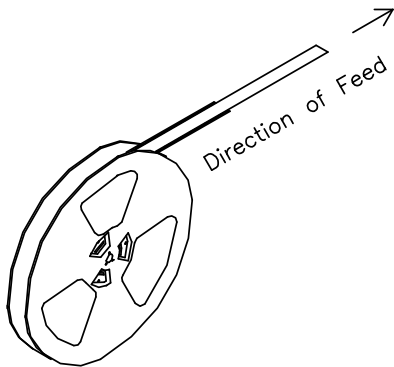
CIRCUIT DIAGRAM





OPTIONS

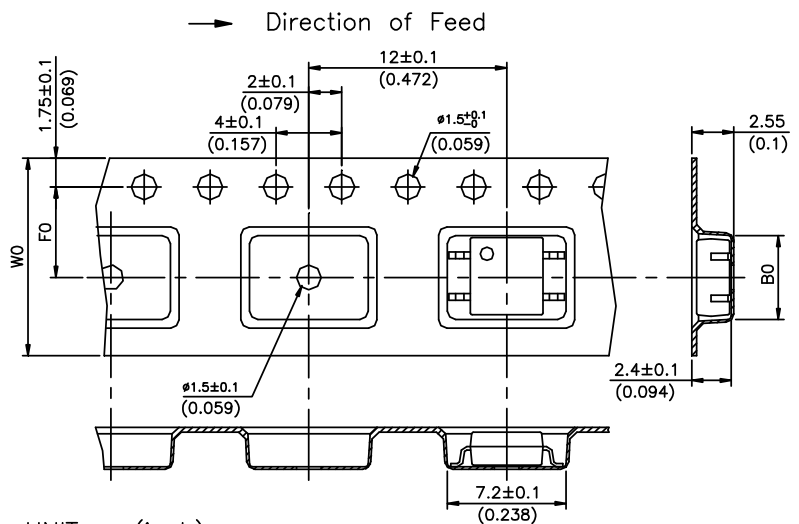
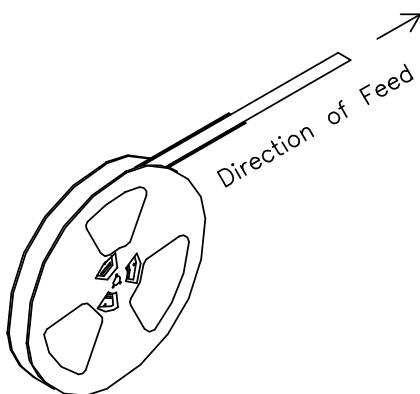
SMD Type
TAPE & REEL Package



UNIT: mm(inch)

TYPE	B0±0.1	F0±0.1	W0±0.3	15"REEL/PCS
4P	5.3(0.209)	7.5(0.295)	16(0.630)	1000
6P	9.4(0.370)	7.5(0.295)	16(0.630)	1000
8P	10.3(0.406)	11.5(0.453)	24(0.945)	1000

SOP Type
TAPE & REEL Package

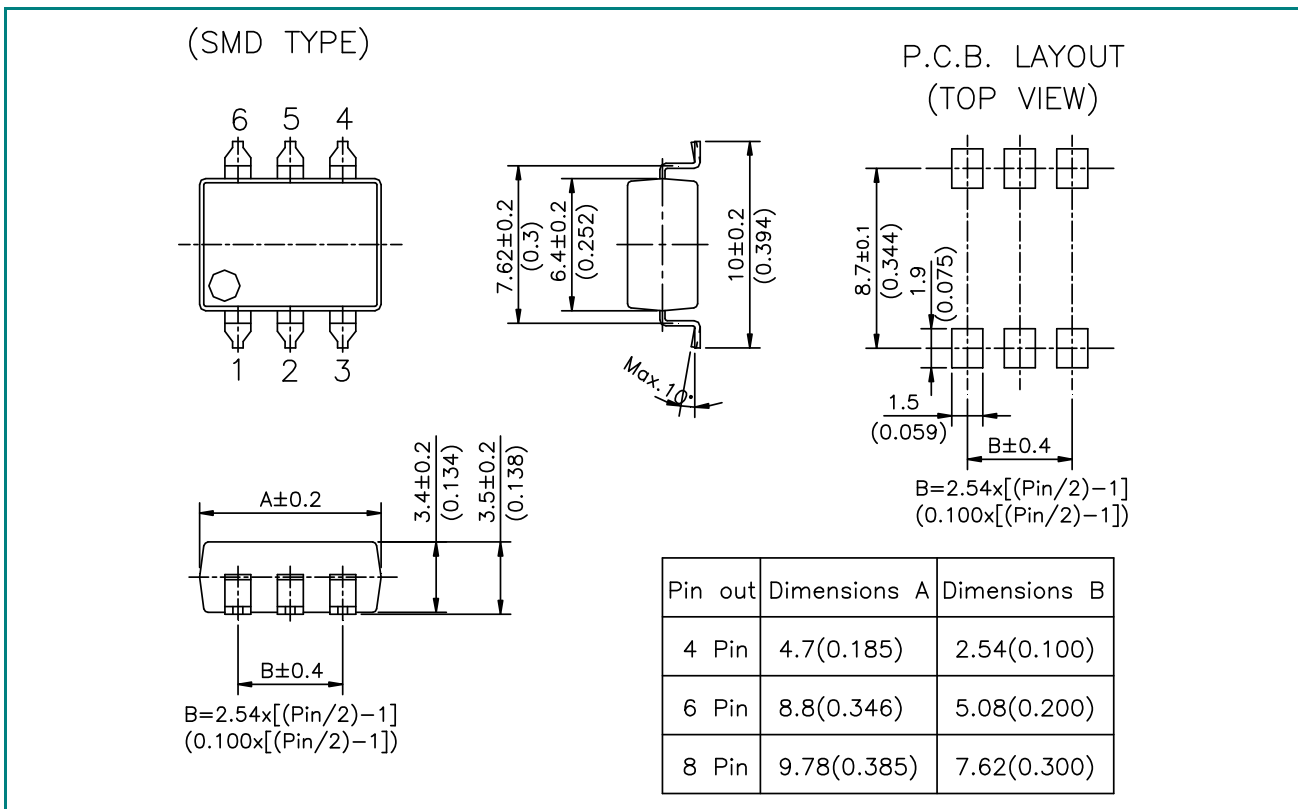
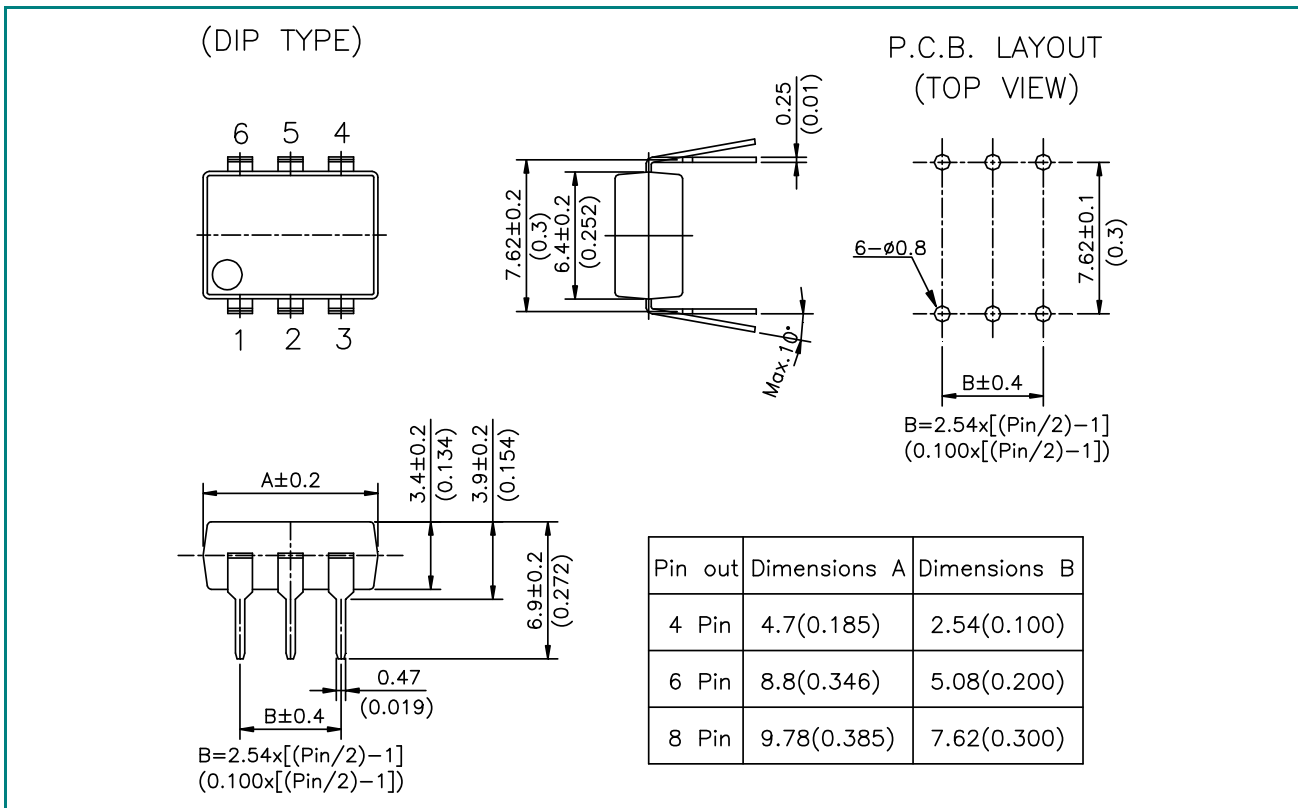


UNIT:mm(inch)

TYPE	B0±0.1	F0±0.1	W0±0.3	13"REEL/PCS
4P	5.1(0.200)	5.5(0.217)	12(0.472)	2000
6P	6.7(0.264)	7.5(0.295)	16(0.630)	2000
8P	9.6(0.378)	7.5(0.295)	16(0.630)	2000

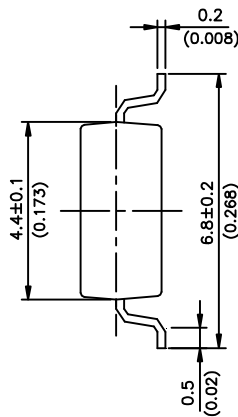
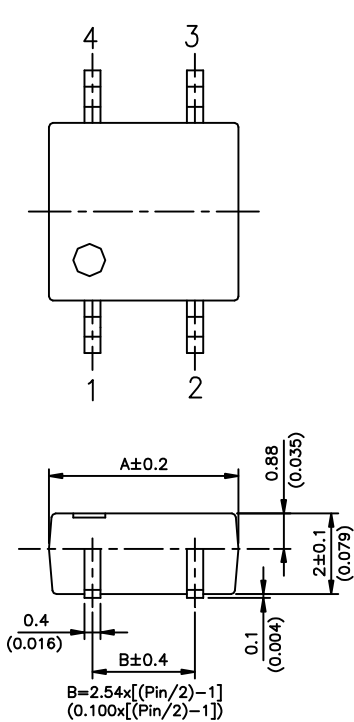


■ DIMENSIONS UNIT:mm(inch)

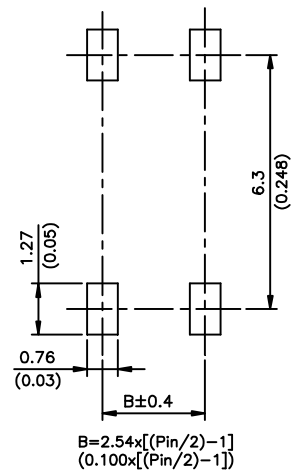




(SOP TYPE)



P.C.B. LAYOUT (TOP VIEW)



Pin out	Dimensions A	Dimensions B
4 Pin	4.7(0.185)	2.54(0.100)
6 Pin	6.30(0.248)	5.08(0.200)
8 Pin	9.3(0.366)	7.62(0.300)



■ SPECIFICATIONS (@25°C / Initial):

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
			311A024X05 311A026X05 312A028X05	311A034X05 311A036X05 312A038X05	311A064X00 311A066X00 312A068X00	311A064X01 311A066X01 312A068X01	311A064X02 311A066X02 312A068X02
			411A024X05 411A026X05 412A028X05	411A034X05 411A036X05 412A038X05	411A064X00 411A066X00 412A068X00	411A064X01 411A066X01 412A068X01	411A064X02 411A066X02 412A068X02
Contact form	4PIN / 6PIN		1A	1A	1A	1A	1A
	8PIN		2A	2A	2A	2A	2A
Input Characteristics							
Forward voltage (V)(V _F)			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 _R)			5	5	5	5	5
Control current (mA)(I _F)			10-50	10-50	5-50	5-50	5-50
Output Characteristics							
Load voltage (V)(AC peak or DC)(V _L)			20	30	60	60	60
Continuous rated load current (mA)(I _L)	SOP		1500	1300	350	120	120
	SMD/DIP		2000	1800	400	120	120
Peak current (mA)(I _{L-Peak})	SOP		2500	2000	600	250	250
	SMD/DIP		2500	2000	700	250	250
On-state resistance Max. (Ω)(R _{ON})			0.5	0.5	1.4	16	8
Off-state leakage current (μA) (I _{LK})			1	1	1	1	1
Turn-on (msec)(T _{ON})			5	5	1	1.5	1.5
Turn-off (msec)(T _{OFF})			2	2	1	1	1
Capacitance (pF)(C _{OUT})			400	300	150	25	25
Current limit typ. (mA)			---	---	---	---	---
Input / Output Characteristics							
I/O Capacitance (pF)(C _{I/O})			5	5	5	5	5
I/O Isolation voltage (VAC)(V _{I/O})	SOP		1500	1500	1500	1500	1500
	SMD/DIP		2500	2500	3750	3750	3750
I/O Isolation resistance (GΩ)(R _{I/O})			5	5	5	5	5
Temperature limits	Operating (T _{OP})		-40°C to +85°C (-40°F to +185°F)				
	Storage (T _{STG})		-40°C to +100°C (-40°F to +212°F)				



Part Number (4 PIN) (6 PIN) (8 PIN)	DIP	EPR	211A064005	211A064009	211A084000	211A084009	211A104000
	SMD		211A066005	211A066009	211A086000	211A086009	211A106000
			212A068005	212A068009	212A088000	212A088009	212A108000
	SMD		311A064X05	311A064X09	311A084X00	311A084X09	311A104X00
			311A066X05	311A066X09	311A086X00	311A086X09	311A106X00
	312A068X05		312A068X09	312A088X00	312A088X09	312A108X00	
	SOP		411A064X05	411A064X09	411A084X00	411A084X09	411A104X00
			411A066X05	411A066X09	411A086X00	411A086X09	411A106X00
			412A068X05	412A068X09	412A088X00	412A088X09	412A108X00
Contact form	4PIN / 6PIN		1A	1A	1A	1A	1A
	8PIN		2A	2A	2A	2A	2A
Input Characteristics							
Forward voltage (V)(V _F)			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 _R)			5	5	5	5	5
Control current (mA)(I _F)			10-50	5-50	5-50	5-50	5-50
Output Characteristics							
Load voltage (V)(AC peak or DC)(V _L)			60	60	80	80	100
Continuous rated load current (mA)(I _L)	SOP		900	350	120	120	120
	SMD/DIP		1100	400	120	120	120
Peak current (mA)(I _{L-Peak})	SOP		1500	600	250	250	250
	SMD/DIP		1500	700	250	250	250
On-state resistance Max. (Ω)(R _{ON})			0.7	1.4	12	12	12
Off-state leakage current (μA) (I _{LK})			1	1	1	1	1
Turn-on (msec)(T _{ON})			5	1	1	1	1
Turn-off (msec)(T _{OFF})			2	1	1	1	1
Capacitance (pF)(C _{OUT})			300	150	25	25	---
Current limit typ. (mA)			---	---	---	---	---
Input / Output Characteristics							
I/O Capacitance (pF)(C _{I/O})			5	5	5	5	5
I/O Isolation voltage (VAC)(V _{I/O})	SOP		1500	2500	1500	2500	1500
	SMD/DIP		2500	5000	3750	5000	3750
I/O Isolation resistance (GΩ)(R _{I/O})			5	5	5	5	5
Temperature limits	Operating (T _{OP})	-40°C to +85°C (-40°F to +185°F)					
	Storage (T _{STG})	-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
			211A206000	211A206009	211A256000	211A256002	211A256009
			212A208000	212A208009	212A258000	212A258002	212A258009
	SMD		311A204X00	311A204X09	311A254X00	311A254X02	311A254X09
			311A206X00	311A206X09	311A256X00	311A256X02	311A256X09
			312A208X00	312A208X09	312A258X00	312A258X02	312A258X09
	SOP		411A204X00	411A204X09	411A254X00	411A254X02	411A254X09
			411A206X00	411A206X09	411A256X00	411A256X02	411A256X09
			412A208X00	412A208X09	412A258X00	412A258X02	412A258X09
Contact form	4PIN / 6PIN		1A	1A	1A	1A	1A
	8PIN		2A	2A	2A	2A	2A
Input Characteristics							
Forward voltage (V)(V _F)			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 _R)			5	5	5	5	5
Control current (mA)(I _F)			5-50	5-50	5-50	5-50	5-50
Output Characteristics							
Load voltage (V)(AC peak or DC)(V _L)			200	200	250	250	250
Continuous rated load current (mA)(I _L)	SOP		150	150	140	140	140
	SMD/DIP		200	200	180	200	180
Peak current (mA)(I _{L-Peak})	SOP		300	300	300	300	300
	SMD/DIP		400	400	350	350	350
On-state resistance Max. (Ω)(R _{ON})			10	10	10	8	10
Off-state leakage current (μA) (I _{LK})			1	1	1	1	1
Turn-on (msec)(T _{ON})			1	1	1	1	1
Turn-off (msec)(T _{OFF})			1	1	1	1	1
Capacitance (pF)(C _{OUT})			100	100	100	---	100
Current limit typ. (mA)			---	---	---	---	---
Input / Output Characteristics							
I/O Capacitance (pF)(C _{I/O})			5	5	5	5	5
I/O Isolation voltage (VAC)(V _{I/O})	SOP		1500	2500	1500	1500	2500
	SMD/DIP		3750	5000	3750	3750	5000
I/O Isolation resistance (GΩ)(R _{I/O})			5	5	5	5	5
Temperature limits	Operating (T _{OP})		-40°C to +85°C (-40°F to +185°F)				
	Storage (T _{STG})		-40°C to +100°C (-40°F to +212°F)				



Part Number (4 PIN) (6 PIN) (8 PIN)	DIP	EPR	211A354000	211A354001	211A354002	211A354009
			211A356000	211A356001	211A356002	211A356009
			212A358000	212A358001	212A358002	212A358009
	SMD		311A354X00	311A354X01	311A354X02	311A354X09
			311A356X00	311A356X01	311A356X02	311A356X09
			312A358X00	312A358X01	312A358X02	312A358X09
	SOP		411A354X00	411A354X01	411A354X02	411A354X09
			411A356X00	411A356X01	411A356X02	411A356X09
			412A358X00	412A358X01	412A358X02	412A358X09
Contact form	4PIN / 6PIN		1A	1A	1A	1A
	8PIN		2A	2A	2A	2A
Input Characteristics						
Forward voltage (V)(V _F)			0.9-1.5	0.9-1.5	0.9-1.5	0.9-1.5
Reverse voltage at 10μA (V)(V _R)			5	5	5	5
Control current (mA)(I _F)			5-50	5-50	5-50	5-50
Output Characteristics						
Load voltage (V)(AC peak or DC)(V _L)			350	350	350	350
Continuous rated load current (mA)(I _L)	SOP		100	80	130	100
	SMD/DIP		130	100	170	130
Peak current (mA)(I _{L-Peak})	SOP		300	200	300	300
	SMD/DIP		300	250	300	300
On-state resistance Max. (Ω)(R _{ON})			30	50	16	30
Off-state leakage current (μA) (I _{LK})			1	1	1	1
Turn-on (msec)(T _{ON})			1	1.5	1	1
Turn-off (msec)(T _{OFF})			1	1	1	1
Capacitance (pF)(C _{OUT})			100	---	200	---
Current limit typ. (mA)			---	---	---	---
Input / Output Characteristics						
I/O Capacitance (pF)(C _{I/O})			5	5	5	5
I/O Isolation voltage (VAC)(V _{I/O})	SOP		1500	1500	1500	2500
	SMD/DIP		3750	3750	3750	5000
I/O Isolation resistance (GΩ)(R _{I/O})			5	5	5	5
Temperature limits	Operating (T _{OP})		-40°C to +85°C (-40°F to +185°F)			
	Storage (T _{STG})		-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 _F)			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 _R)			5	5	5	5	5
Control current (mA)(I _F)			5-50	5-50	5-50	5-50	5-50
Output Characteristics							
Load voltage (V)(AC peak or DC)(V _L)			400	400	400	600	600
Continuous rated load current (mA)(I _L)	SOP		100	120	100	50	50
	SMD/DIP		130	150	130	70	70
Peak current (mA)(I _{L-Peak})	SOP		250	300	250	100	100
	SMD/DIP		300	300	300	120	120
On-state resistance Max. (Ω)(R _{ON})			30	16	30	70	70
Off-state leakage current (μA) (I _{LK})			1	1	1	1	1
Turn-on (msec)(T _{ON})			1	1	1	1	1
Turn-off (msec)(T _{OFF})			1	1	1	1	1
Capacitance (pF)(C _{OUT})			70	---	70	100	100
Current limit typ. (mA)			---	---	---	---	---
Input / Output Characteristics							
I/O Capacitance (pF)(C _{I/O})			5	5	5	5	5
I/O Isolation voltage (VAC)(V _{I/O})	SOP		1500	1500	2500	1500	2500
	SMD/DIP		3750	3750	5000	3750	5000
I/O Isolation resistance (GΩ)(R _{I/O})			5	5	5	5	5
Temperature limits	Operating (T _{OP})		-40°C to +85°C (-40°F to +185°F)				
	Storage (T _{STG})		-40°C to +100°C (-40°F to +212°F)				



Part Number (4 PIN) (6 PIN) (8 PIN)	DIP	EPR	211B064000 211B066000 212B068000	211B064009 211B066009 212B068009	211B204000 211B206000 212B208000	211B204009 211B206009 212B208009
	SMD		311B064X00 311B066X00 312B068X00	311B064X09 311B066X09 312B068X09	311B204X00 311B206X00 312B208X00	311B204X09 311B206X09 312B208X09
	SOP		411B064X00 411B066X00 412B068X00	411B064X09 411B066X09 412B068X09	411B204X00 411B206X00 412B208X00	411B204X09 411B206X09 412B208X09
Contact form	4PIN / 6PIN		1B	1B	1B	1B
	8PIN		2B	2B	2B	2B
Input Characteristics						
Forward voltage (V)(V _F)			0.9-1.5	0.9-1.5	0.9-1.5	0.9-1.5
Reverse voltage at 10μA (V)(V _R)			5	5	5	5
Control current (mA)(I _F)			5-50	5-50	5-50	5-50
Output Characteristics						
Load voltage (V)(AC peak or DC)(V _L)			60	60	200	200
Continuous rated load current (mA)(I _L)	SOP		100	100	80	80
	SMD/DIP		100	100	100	100
Peak current (mA)(I _{L-Peak})	SOP		250	250	200	200
	SMD/DIP		300	300	250	250
On-state resistance Max. (Ω)(R _{ON})			6	6	50	50
Off-state leakage current (μA) (I _{LK})			10	10	10	10
Turn-on (msec)(T _{ON})			1	1	1	1
Turn-off (msec)(T _{OFF})			1	1	1	1
Capacitance (pF)(C _{OUT})			---	---	200	200
Current limit typ. (mA)			---	---	---	---
Input / Output Characteristics						
I/O Capacitance (pF)(C _{I/O})			5	5	5	5
I/O Isolation voltage (VAC)(V _{I/O})	SOP		1500	2500	1500	2500
	SMD/DIP		3750	5000	3750	5000
I/O Isolation resistance (GΩ)(R _{I/O})			5	5	5	5
Temperature limits	Operating (T _{OP})	-40°C to +85°C (-40°F to +185°F)				
	Storage (T _{STG})	-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 _F)			0.9-1.5	0.9-1.5	0.9-1.5	0.9-1.5
Reverse voltage at 10μA (V)(V _R)			5	5	5	5
Control current (mA)(I _F)			5-50	5-50	5-50	5-50
Output Characteristics						
Load voltage (V)(AC peak or DC)(V _L)			350	350	400	400
Continuous rated load current (mA)(I _L)	SOP		80	80	80	80
	SMD/DIP		100	100	100	100
Peak current (mA)(I _{L-Peak})	SOP		200	200	200	200
	SMD/DIP		250	250	250	250
On-state resistance Max. (Ω)(R _{ON})			50	50	50	50
Off-state leakage current (μA) (I _{LK})			10	10	10	10
Turn-on (msec)(T _{ON})			1	1	1	1
Turn-off (msec)(T _{OFF})			1	1	1	1
Capacitance (pF)(C _{OUT})			200	200	200	200
Current limit typ. (mA)			---	---	---	---
Input / Output Characteristics						
I/O Capacitance (pF)(C _{I/O})			5	5	5	5
I/O Isolation voltage (VAC)(V _{I/O})	SOP		1500	2500	1500	2500
	SMD/DIP		3750	5000	3750	5000
I/O Isolation resistance (GΩ)(R _{I/O})			5	5	5	5
Temperature limits	Operating (T _{OP})		-40°C to +85°C (-40°F to +185°F)			
	Storage (T _{STG})		-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 _F)		0.9-1.5		0.9-1.5		0.9-1.5		0.9-1.5		
Reverse voltage at 10µA (V)(V _R)		5		5		5		5		
Control current (mA)(I _F)		5-50		5-50		5-50		5-50		
Output Characteristics										
Load voltage (V)(AC peak or DC)(V _L)		60	60	60	60	200	200	200	200	
Continuous rated load current (mA)(I _L)	SOP	350	100	350	100	150	80	150	80	
	SMD/DIP	400	100	400	100	200	100	200	100	
Peak current (mA)(I _{L-Peak})	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 _{ON})		1.4	6	1.4	6	10	50	10	50	
Off-state leakage current (µA) (I _{LK})		1	10	1	10	1	10	1	10	
Turn-on (msec)(T _{ON})		1	1	1	1	1	1	1	1	
Turn-off (msec)(T _{OFF})		1	1	1	1	1	1	1	1	
Capacitance (pF)(C _{OUT})		150	---	150	---	100	200	100	200	
Current limit typ. (mA)		---	---	---	---	---	---	---	---	
Input / Output Characteristics										
I/O Capacitance (pF)(C _{I/O})		5		5		5		5		
I/O Isolation voltage (VAC)(V _{I/O})	SOP	1500		2500		1500		2500		
	SMD/DIP	3750		5000		3750		5000		
I/O Isolation resistance (GΩ)(R _{I/O})		5		5		5		5		
Temperature limits	Operating (T _{OP})	-40°C to +85°C (-40°F to +185°F)								
	Storage (T _{STG})	-40°C to +100°C (-40°F to +212°F)								



Part Number (4 PIN) (6 PIN) (8 PIN)	DIP	EPR	----- 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 _F)			0.9-1.5		0.9-1.5		0.9-1.5		0.9-1.5	
Reverse voltage at 10μA (V)(V _R)			5		5		5		5	
Control current (mA)(I _F)			5-50		5-50		5-50		5-50	
Output Characteristics										
Load voltage (V)(AC peak or DC)(V _L)			350	350	350	350	400	400	400	400
Continuous rated load current (mA)(I _L)	SOP		100	80	100	80	100	80	100	80
	SMD/DIP		130	100	130	100	130	100	130	100
Peak current (mA)(I _{L-Peak})	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 _{ON})			30	50	30	50	30	50	30	50
Off-state leakage current (μA) (I _{LK})			1	10	1	10	1	10	1	10
Turn-on (msec)(T _{ON})			1	1	1	1	1	1	1	1
Turn-off (msec)(T _{OFF})			1	1	1	1	1	1	1	1
Capacitance (pF)(C _{OUT})			---	200	---	200	70	150	70	150
Current limit typ. (mA)			---	---	---	---	---	---	---	---
Input / Output Characteristics										
I/O Capacitance (pF)(C _{I/O})			5		5		5		5	
I/O Isolation voltage (VAC)(V _{I/O})	SOP		1500		2500		1500		2500	
	SMD/DIP		3750		5000		3750		5000	
I/O Isolation resistance (GΩ)(R _{I/O})			5		5		5		5	
Temperature limits	Operating (T _{OP})		-40°C to +85°C (-40°F to +185°F)							
	Storage (T _{STG})		-40°C to +100°C (-40°F to +212°F)							



Part Number (4 PIN) (6 PIN) (8 PIN)	DIP	EPR	211A354000L	211A354001L	211A354002L	211A404000L	211A404002L
			211A356000L	211A356001L	211A356002L	211A406000L	211A406002L
			212A358000L	212A358001L	212A358002L	212A408000L	212A408002L
	SMD		311A354X00L	311A354X01L	311A354X02L	311A404X00L	311A404X02L
			311A356X00L	311A356X01L	311A356X02L	311A406X00L	311A406X02L
			312A358X00L	312A358X01L	312A358X02L	312A408X00L	312A408X02L
	SOP		411A354X00L	411A354X01L	411A354X02L	411A404X00L	411A404X02L
			411A356X00L	411A356X01L	411A356X02L	411A406X00L	411A406X02L
			412A358X00L	412A358X01L	412A358X02L	412A408X00L	412A408X02L
Contact form	4PIN / 6PIN	1A	1A	1A	1A	1A	
	8PIN	2A	2A	2A	2A	2A	
Input Characteristics							
Forward voltage (V)(V _F)		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 _R)		5	5	5	5	5	
Control current (mA)(I _F)		5-50	5-50	5-50	5-50	5-50	
Output Characteristics							
Load voltage (V)(AC peak or DC)(V _L)		350	350	350	400	400	
Continuous rated load current (mA)(I _L)	SOP	100	80	120	100	100	
	SMD/DIP	120	100	120	120	120	
Peak current (mA)(I _{L-Peak})	SOP	120	120	120	120	120	
	SMD/DIP	120	120	120	120	120	
On-state resistance Max. (Ω)(R _{ON})		35	55	22	40	22	
Off-state leakage current (μA) (I _{LK})		1	1	1	1	1	
Turn-on (msec)(T _{ON})		3	3	3	3	3	
Turn-off (msec)(T _{OFF})		1	1	1	1	1	
Capacitance (pF)(C _{OUT})		---	---	---	70	---	
Current limit typ. (mA)		180	180	180	180	180	
Input / Output Characteristics							
I/O Capacitance (pF)(C _{I/O})		5	5	5	5	5	
I/O Isolation voltage (VAC)(V _{I/O})	SOP	1500	1500	1500	1500	1500	
	SMD/DIP	3750	3750	3750	3750	3750	
I/O Isolation resistance (GΩ)(R _{I/O})		5	5	5	5	5	
Temperature limits	Operating (T _{OP})	-40°C to +85°C (-40°F to +185°F)					
	Storage (T _{STG})	-40°C to +100°C (-40°F to +212°F)					



Part Number (4 PIN) (6 PIN) (8 PIN)	DIP	EPR	211A044005 211A046005 212A048005	211A034006 211A036006 212A038006	----- 211A106005 -----	----- 211A038005 -----	----- 211A048005 -----
	SMD		311A044X05 311A046X05 312A048X05	311A034X06 311A036X06 312A038X06	----- 311A106X05 -----	----- 311A038005 -----	----- 311A048005 -----
	SOP		411A044X05 411A046X05 412A048X05	----- 411A036X06 -----	----- 411A106X05 -----	----- ----- -----	----- ----- -----
Contact form	4PIN / 6PIN		1A	1A	1A	---	---
	8PIN		2A	2A	2A	1A	1A
Input Characteristics							
Forward voltage (V)(V _F)			0.9-1.5	0.9-1.5	0.9-1.5	2.0-3.0	2.0-3.0
Reverse voltage at 10 μ A (V)(V _R)			5	5	5	5	5
Control current (mA)(I _F)			10-50	10-50	10-50	10-50	10-50
Output Characteristics							
Load voltage (V)(AC peak or DC)(V _L)			40	30	100	30	40
Continuous rated load current (mA)(I _L)	SOP		1300	2500	800	---	---
	SMD/DIP		1800	3000	1000	6000	5500
Peak current (mA)(I _{L-Peak})	SOP		2500	5000	1500	---	---
	SMD/DIP		2500	5000	1500	12000	12000
On-state resistance Max. (Ω)(R _{ON})			0.5	0.2	0.5	0.1	0.1
Off-state leakage current (μ A)(I _{LK})			1	1	1	10	10
Turn-on (msec)(T _{ON})			5	5	5	10	10
Turn-off (msec)(T _{OFF})			2	2	2	2	2
Capacitance (pF)(C _{OUT})			---	---	---	---	---
Current limit typ. (mA)			---	---	---	---	---
Input / Output Characteristics							
I/O Capacitance (pF)(C _{I/O})			5	5	5	5	5
I/O Isolation voltage (VAC)(V _{I/O})	SOP		1500	1500	1500	---	---
	SMD/DIP		2500	2500	2500	2500	2500
I/O Isolation resistance (G Ω)(R _{I/O})			5	5	5	5	5
Temperature limits	Operating (T _{OP})	-40 $^{\circ}$ C to +85 $^{\circ}$ C (-40 $^{\circ}$ F to +185 $^{\circ}$ F)					
	Storage (T _{STG})	-40 $^{\circ}$ C to +100 $^{\circ}$ C (-40 $^{\circ}$ F to +212 $^{\circ}$ F)					