



*Rely on ECE's Relays,
and You Always Relax!*

MOS RELAY EPR SERIES

E236930, E155181(R)

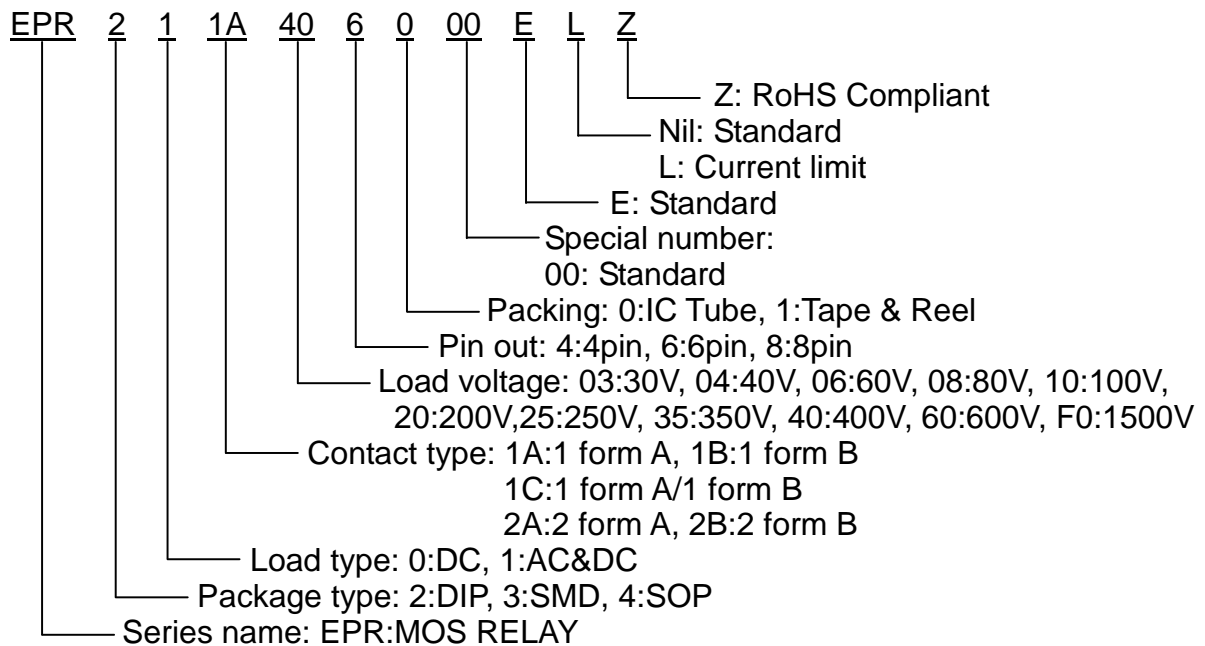
FEATURES

- 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



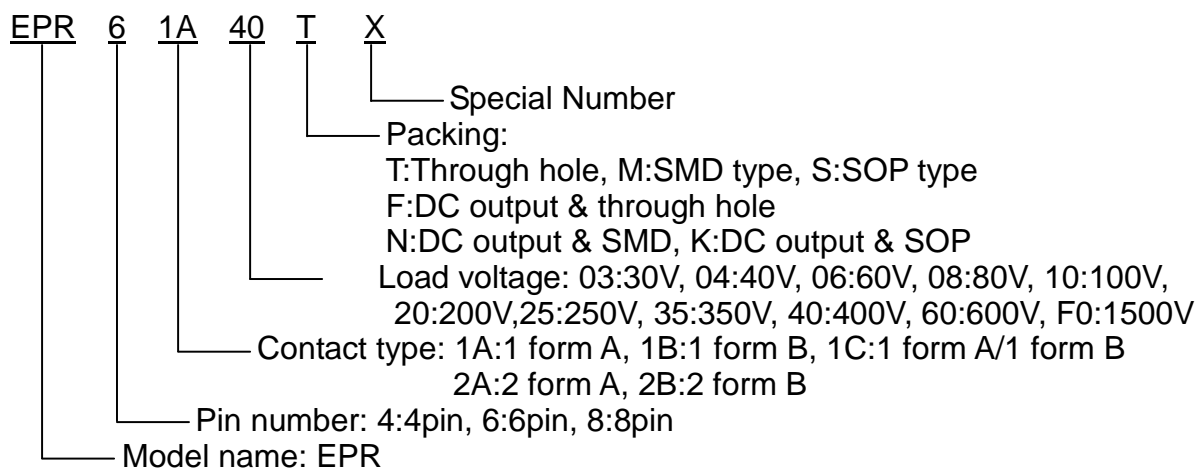
SMD TYPE



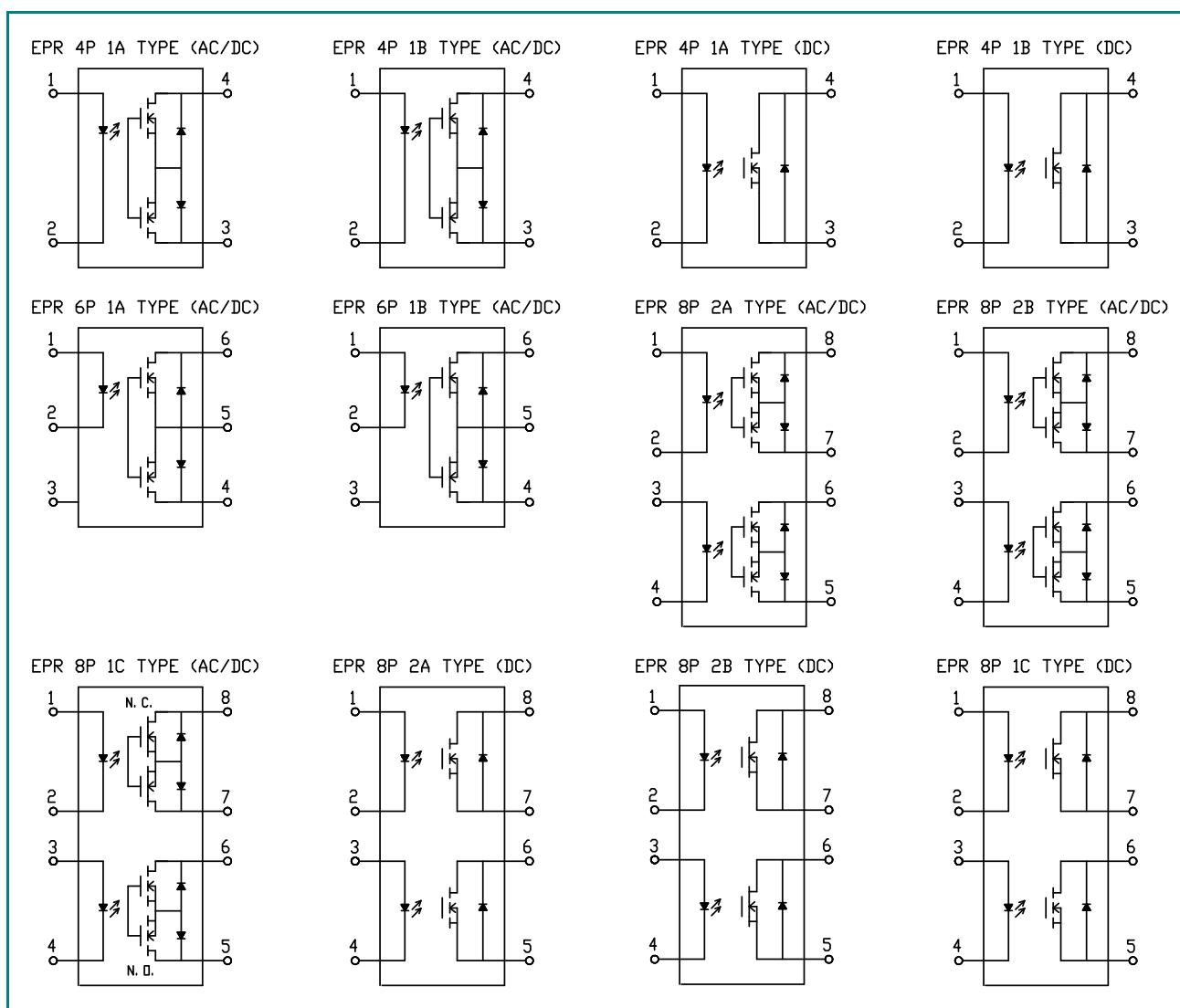
SOP TYPE



MARKING SYSTEM

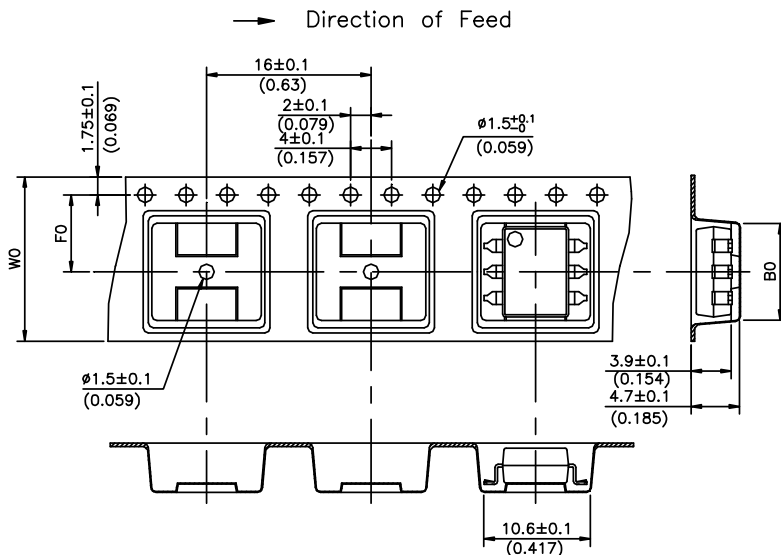
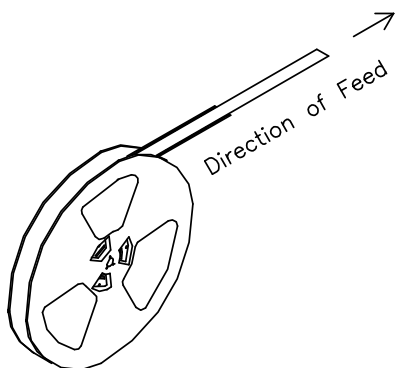


CIRCUIT DIAGRAM



OPTIONS

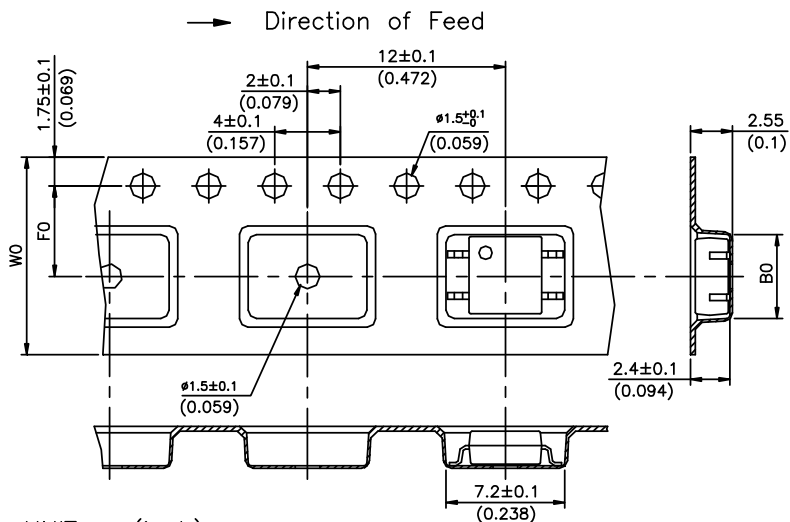
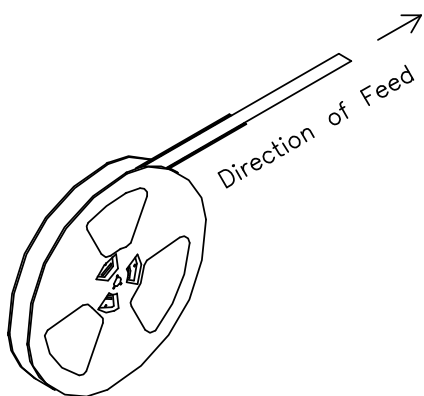
SMD Type
TAPE & REEL Package



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

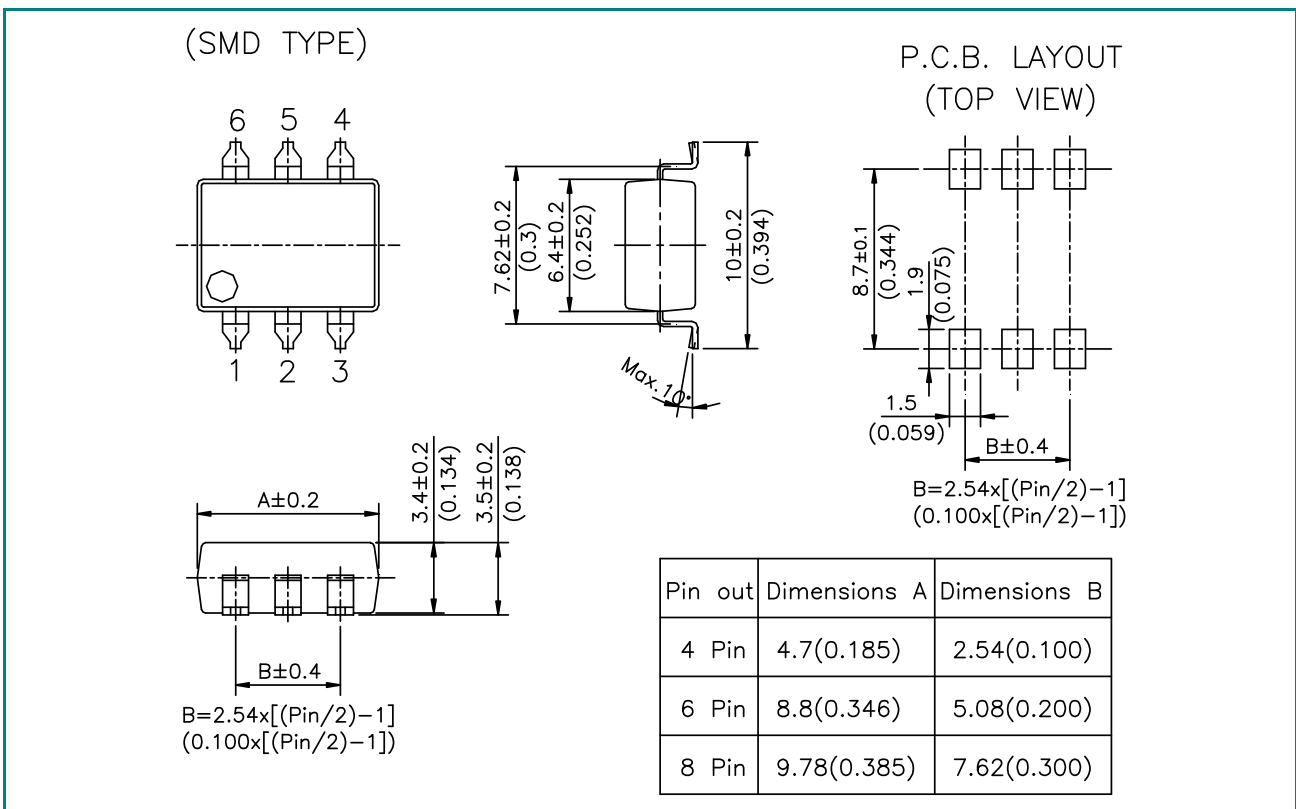
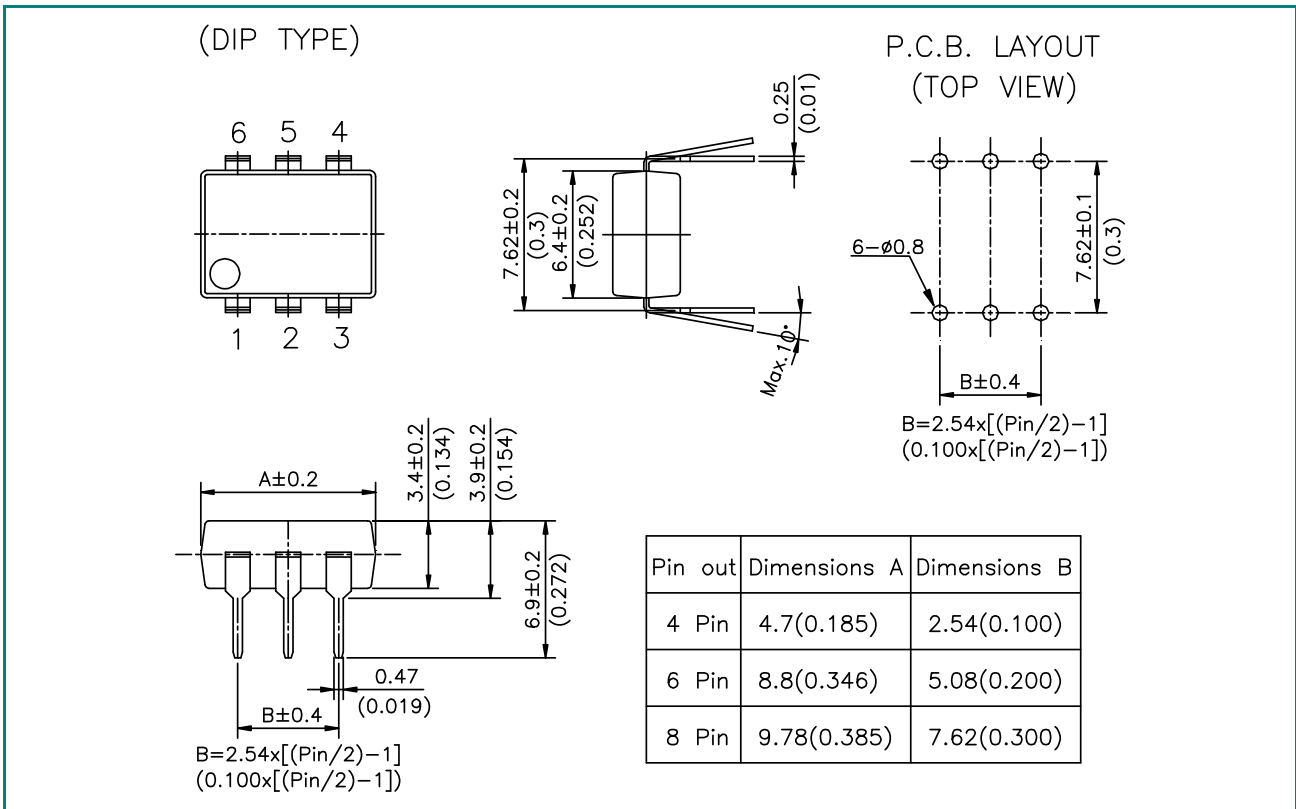
SOP Type
TAPE & REEL Package



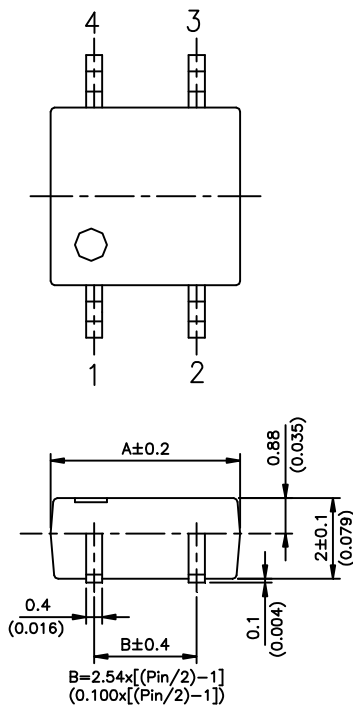
UNIT: mm(inch)

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

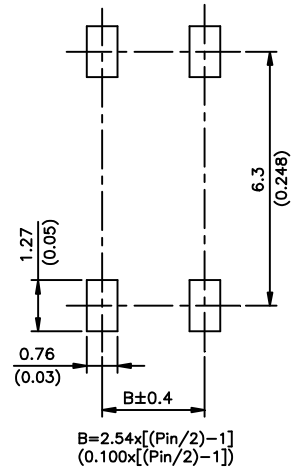
■ DIMENSIONS UNIT:mm(inch)



(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)



**Rely on ECE's Relays,
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■ **SPECIFICATIONS (@25°C / Initial):**

Part Number (4 PIN) (6 PIN) (8 PIN)	DIP	EPR	211A034005 211A036005 212A038005	211A034006 211A036006 212A038006	211A044005 211A046005 212A048005	----- 211A046007 -----
	SMD		311A034X05 311A036X05 312A038X05	311A034X06 311A036X06 312A038X06	311A044X05 311A046X05 312A048X05	----- 311A046X07 -----
	SOP		411A034X05 411A036X05 412A038X05	----- 411A036X06 -----	411A044X05 411A046X05 412A048X05	----- ----- -----
Contact form	4PIN / 6PIN		1A	1A	1A	1A
	8PIN		2A	2A	2A	---
Input Characteristics						
LED turn on Current (mA)(I _{on})			0.5-2	0.5-2	0.5-2	0.5-2
Reverse voltage at 10µA (V)(V _R)			5	5	5	5
Control current (mA)(I _F)			50	50	50	50
Output Characteristics						
Load voltage (V)(AC peak or DC)(V _L)			30	30	40	40
Continuous rated load current (mA)(I _L)	SOP		1300	2500	1600	---
	SMD/DIP		1800	3000	2000	4500
Peak current (mA)(I _{L-Peak})	SOP		2000	5000	2500	---
	SMD/DIP		2000	5000	2500	7500
On-state resistance. (Ω)(R _{ON})	Max		0.3	0.2	0.35	0.05
	Typ		0.06	0.055	0.08	0.033
Off-state leakage current (µA) (I _{LK})			1	1	1	1
Turn-on (msec)(T _{ON}) (I _F =10mA, I _L =Rating)	Max		2	2	5	5
	Typ		1	1	1.8	1.2
Turn-off (msec)(T _{OFF})	Max		0.2	0.2	0.2	0.2
	Typ		0.05	0.03	0.03	0.03
Capacitance (pF)(C _{OUT})			170	170	335	690
Input / Output Characteristics						
I/O Capacitance (pF)(C _{I/O})			5	5	5	5
I/O Isolation voltage (VAC)(V _{I/O})	SOP		2500	2500	2500	---
	SMD/DIP		3750	3750	3750	3750
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)				



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Part Number (4 PIN) (6 PIN) (8 PIN)	DIP	EPR	211A064000 211A066000 212A068000	211A064005 211A066005 212A068005	----- 211A066006 -----	----- 211A066007 -----	211A064009 211A066009 212A068009
	SMD		311A064X00 311A066X00 312A068X00	311A064X05 311A066X05 312A068X05	----- 311A066X06 -----	----- 311A066X07 -----	311A064X09 311A066X09 312A068X09
	SOP		411A064X00 411A066X00 412A068X00	411A064X05 411A066X05 412A068X05	----- 411A066X06 -----	----- ----- -----	411A064X09 411A066X09 412A068X09
Contact form	4PIN / 6PIN		1A	1A	1A	1A	1A
	8PIN		2A	2A	---	---	2A
Input Characteristics							
LED turn on Current (mA)(I _{Fon})			0.5-2	0.5-2	0.5-2	0.5-2	0.5-2
Reverse voltage at 10µA (V)(V _R)			5	5	5	5	5
Control current (mA)(I _F)			50	50	50	50	50
Output Characteristics							
Load voltage (V)(AC peak or DC)(V _L)			60	60	60	60	60
Continuous rated load current (mA)(I _L)	SOP		500	900	1500	---	500
	SMD/DIP		550	1100	1800	2500	550
Peak current (mA)(I _{L-Peak})	SOP		1000	1500	2500	---	1000
	SMD/DIP		1000	1500	2500	4000	1000
On-state resistance Max. (Ω)(R _{ON})	Max		1.4	0.7	0.5	0.2	1.4
	Typ		0.85	0.2	0.1	0.07	0.85
Off-state leakage current (µA) (I _{LK})			1	1	1	1	1
Turn-on (msec)(T _{ON})	Max		1	2	5	5	1
	Typ		0.5	1.2	2.5	3	0.5
Turn-off (msec)(T _{OFF})	Max		0.2	0.2	0.2	0.2	0.2
	Typ		0.03	0.03	0.05	0.05	0.03
Capacitance (pF)(C _{OUT})			36	160	235		36
Input / Output Characteristics							
I/O Capacitance (pF)(C _{I/O})			5	5	5	5	5
I/O Isolation voltage (VAC)(V _{I/O})	SOP		2500	2500	2500	---	3000
	SMD/DIP		3750	3750	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)					



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Part Number (4 PIN) (6 PIN) (8 PIN)	DIP	EPR	211A084000	211A084009	211A104000	211A104005	211A104009
	SMD		211A086000	211A086009	211A106000	211A106005	211A106009
			212A088000	212A088009	212A108000	212A108005	212A108009
	SOP		311A084X00	311A084X09	311A104X00	311A104X05	311A104X09
			311A086X00	311A086X09	311A106X00	311A106X05	311A106X09
			312A088X00	312A088X09	312A108X00	312A108X05	312A108X09
			411A084X00	411A084X09	411A104X00	-----	411A104X09
			411A086X00	411A086X09	411A106X00	411A106X05	411A106X09
			412A088X00	412A088X09	412A108X00	-----	412A108X09
Contact form	4PIN / 6PIN		1A	1A	1A	1A	1A
	8PIN		2A	2A	2A	2A	2A
Input Characteristics							
LED turn on Current (mA)(I _{Fon})			0.5-2	0.5-2	0.5-2	0.5-2	0.5-2
Reverse voltage at 10µA (V)(V _R)			5	5	5	5	5
Control current (mA)(I _F)			50	50	50	50	50
Output Characteristics							
Load voltage (V)(AC peak or DC)(V _L)			80	80	100	100	100
Continuous rated load current (mA)(I _L)	SOP		120	120	310	1300	310
	SMD/DIP		120	120	350	1600	350
Peak current (mA)(I _{L-Peak})	SOP		250	250	900	2500	900
	SMD/DIP		250	250	900	2500	900
On-state resistance Max. (Ω)(R _{ON})	Max		12	12	5	0.3	5
	Typ		6	6	2	0.18	2
Off-state leakage current (µA) (I _{LK})			1	1	1	1	1
Turn-on (msec)(T _{ON})	Max		1	1	1	5	1
	Typ		0.5	0.5	0.2	2	0.2
Turn-off (msec)(T _{OFF})	Max		0.2	0.2	0.2	0.2	0.2
	Typ		0.03	0.03	0.03	0.03	0.03
Capacitance (pF)(C _{OUT})			25	25	33	115	33
Input / Output Characteristics							
I/O Capacitance (pF)(C _{I/O})			5	5	5	5	5
I/O Isolation voltage (VAC)(V _{I/O})	SOP		2500	3000	2500	2500	3000
	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)				



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Part Number (4 PIN) (6 PIN) (8 PIN)	DIP	EPR	211A204000 211A206000 212A208000	211A204009 211A206009 212A208009	211A254000 211A256000 212A258000	211A254009 211A256009 212A258009
	SMD		311A204X00 311A206X00 312A208X00	311A204X09 311A206X09 312A208X09	311A254X00 311A256X00 312A258X00	311A254X09 311A256X09 312A258X09
	SOP		411A204X00 411A206X00 412A208X00	411A204X09 411A206X09 412A208X09	411A254X00 411A256X00 412A258X00	411A254X09 411A256X09 412A258X09
Contact form	4PIN / 6PIN		1A	1A	1A	1A
	8PIN		2A	2A	2A	2A
Input Characteristics						
LED turn on Current (mA)(I _{Fon})			0.5-2	0.5-2	0.5-2	0.5-2
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)			200	200	250	250
Continuous rated load current (mA)(I _L)	SOP		150	150	140	140
	SMD/DIP		200	200	180	180
Peak current (mA)(I _{L-Peak})	SOP		300	300	300	300
	SMD/DIP		400	400	350	350
On-state resistance Max. (Ω)(R _{ON})	Max		10	10	10	10
	Typ		7.5	7.5	7.5	7.5
Off-state leakage current (µA) (I _{LK})			1	1	1	1
Turn-on (msec)(T _{ON})	Max		1	1	1	1
	Typ		0.4	0.4	0.5	0.5
Turn-off (msec)(T _{OFF})	Max		0.2	0.2	0.2	0.2
	Typ		0.02	0.02	0.03	0.03
Capacitance (pF)(C _{OUT})			85	85	85	85
Input / Output Characteristics						
I/O Capacitance (pF)(C _{I/O})			5	5	5	5
I/O Isolation voltage (VAC)(V _{I/O})	SOP		2500	3000	2500	3000
	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)				



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Part Number (4 PIN) (6 PIN) (8 PIN)	DIP	EPR	211A354000	211A354001	211A354009	
	SMD		211A356000	211A356001	211A356009	
			212A358000	212A358001	212A358009	
SMD	EPR	311A354X00	311A354X01	311A354X09		
		311A356X00	311A356X01	311A356X09		
SOP	EPR	312A358X00	312A358X01	312A358X09		
		411A354X00	411A354X01	411A354X09		
Contact form	4PIN / 6PIN		1A	1A	1A	
	8PIN		2A	2A	2A	
Input Characteristics						
LED turn on Current (mA)(I _{Fon})			0.5-2	0.5-2	0.5-2	
Reverse voltage at 10µA (V)(V _R)			5	5	5	
Control current (mA)(I _F)			5-50	5-50	5-50	
Output Characteristics						
Load voltage (V)(AC peak or DC)(V _L)			350	350	350	
Continuous rated load current (mA)(I _L)	SOP		100	80	100	
	SMD/DIP		130	100	130	
Peak current (mA)(I _{L-Peak})	SOP		300	200	300	
	SMD/DIP		300	250	300	
On-state resistance Max. (Ω)(R _{ON})	Max		30	50	30	
	Typ		18	22	18	
Off-state leakage current (µA) (I _{LK})			1	1	1	
Turn-on (msec)(T _{ON})	Max		1	1	1	
	Typ		0.4	0.6	0.4	
Turn-off (msec)(T _{OFF})	Max		0.2	0.2	0.2	
	Typ		0.03	0.03	0.03	
Capacitance (pF)(C _{OUT})			130	130	130	
Input / Output Characteristics						
I/O Capacitance (pF)(C _{I/O})			5	5	5	
I/O Isolation voltage (VAC)(V _{I/O})	SOP		2500	2500	3000	
	SMD/DIP		3750	3750	5000	
I/O Isolation resistance (GΩ)(R _{I/O})			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)				



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Part Number (4 PIN) (6 PIN) (8 PIN)	DIP	EPR	211A404000	211A404009	211A604000	211A604009
	SMD		211A406000	211A406009	211A606000	211A606009
			212A408000	212A408009	212A608000	212A608009
	SOP		311A404X00	311A404X09	311A604X00	311A604X09
			311A406X00	311A406X09	311A606X00	311A606X09
			312A408X00	312A408X09	312A608X00	312A608X09
			411A404X00	411A404X09	411A604X00	411A604X09
			411A406X00	411A406X09	411A606X00	411A606X09
			412A408X00	412A408X09	412A608X00	412A608X09
Contact form	4PIN / 6PIN		1A	1A	1A	1A
	8PIN		2A	2A	2A	2A
Input Characteristics						
LED turn on Current (mA)(I _{Fon})			0.5-2	0.5-2	0.5-2	0.5-2
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)			400	400	600	600
Continuous rated load current (mA)(I _L)	SOP		100	100	50	50
	SMD/DIP		130	130	70	70
Peak current (mA)(I _{L-Peak})	SOP		250	250	100	100
	SMD/DIP		300	300	120	120
On-state resistance Max. (Ω)(R _{ON})	Max		30	30	70	70
	Typ		18	18	50	50
Off-state leakage current (µA) (I _{LK})			1	1	1	1
Turn-on (msec)(T _{ON})	Max		1	1	1	1
	Typ		0.4	0.4	0.5	0.5
Turn-off (msec)(T _{OFF})	Max		0.2	0.2	0.2	0.2
	Typ		0.03	0.03	0.05	0.05
Capacitance (pF)(C _{OUT})			130	130	55	55
Input / Output Characteristics						
I/O Capacitance (pF)(C _{I/O})			5	5	5	5
I/O Isolation voltage (VAC)(V _{I/O})	SOP		2500	3000	2500	3000
	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)				



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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		
SOP	312B068X00	312B068X09	312B208X00	312B208X09		
	411B064X00	411B064X09	411B204X00	411B204X09		
4PIN / 6PIN	411B066X00	411B066X09	411B206X00	411B206X09		
	412B068X00	412B068X09	412B208X00	412B208X09		
Contact form	8PIN	1B	1B	1B	1B	
		2B	2B	2B	2B	
Input Characteristics						
LED turn on Current (mA)(I _{Fon})		0.5-2	0.5-2	0.5-2	0.5-2	
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	500	500	80	80	
	SMD/DIP	550	550	100	100	
Peak current (mA)(I _{L-Peak})	SOP	1000	1000	200	200	
	SMD/DIP	1000	1000	250	250	
On-state resistance Max. (Ω)(R _{ON})	Max	1.4	1.4	50	50	
	Typ	0.85	0.85	25	25	
Off-state leakage current (μA) (I _{LK})		10	10	10	10	
Turn-on (msec)(T _{ON})	Max	0.2	0.2	0.2	0.2	
	Typ	0.05	0.05	0.05	0.05	
Turn-off (msec)(T _{OFF})	Max	1	1	1	1	
	Typ	0.7	0.7	0.4	0.4	
Capacitance (pF)(C _{OUT})		225	225	240	240	
Input / Output Characteristics						
I/O Capacitance (pF)(C _{I/O})		5	5	5	5	
I/O Isolation voltage (VAC)(V _{I/O})	SOP	2500	3000	2500	3000	
	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)				



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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						
LED turn on Current (mA)(I _{Fon})			0.5-2	0.5-2	0.5-2	0.5-2
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})	Max		50	50	50	50
	Typ		25	25	25	25
Off-state leakage current (µA) (I _{LK})			10	10	10	10
Turn-on (msec)(T _{ON})	Max		0.2	0.2	0.2	0.2
	Typ		0.03	0.03	0.03	0.03
Turn-off (msec)(T _{OFF})	Max		1	1	1	1
	Typ		0.4	0.4	0.4	0.4
Capacitance (pF)(C _{OUT})			240	240	240	240
Input / Output Characteristics						
I/O Capacitance (pF)(C _{I/O})			5	5	5	5
I/O Isolation voltage (VAC)(V _{I/O})	SOP		2500	3000	2500	3000
	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)			



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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										
LED turn on Current (mA)(I _{Fon})		0.5-2		0.5-2		0.5-2		0.5-2		
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	500	500	500	500	150	80	150	80	
	SMD/DIP	550	550	550	550	200	100	200	100	
Peak current (mA)(I _{L-Peak})	SOP	1000	1000	1000	1000	300	200	300	200	
	SMD/DIP	1000	1000	1000	1000	400	250	400	250	
On-state resistance Max. (Ω)(R _{ON})	Max	1.4	1.4	1.4	1.4	10	50	10	50	
	Typ	0.85	0.85	0.85	0.85	7.5	25	7.5	25	
Off-state leakage current (µA) (I _{LK})		1	10	1	10	1	10	1	10	
Turn-on (msec)(T _{ON})	Max	1	0.2	1	0.2	1	0.2	1	0.2	
	Typ	0.5	0.05	0.5	0.05	0.4	0.05	0.4	0.05	
Turn-off (msec)(T _{OFF})	Max	0.2	1	0.2	1	0.2	1	0.2	1	
	Typ	0.03	0.7	0.03	0.7	0.02	0.4	0.02	0.4	
Capacitance (pF)(C _{OUT})		36	225	36	225	85	240	85	240	
Input / Output Characteristics										
I/O Capacitance (pF)(C _{I/O})		5		5		5		5		
I/O Isolation voltage (VAC)(V _{I/O})	SOP	2500		3000		2500		3000		
	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)								



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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									
LED turn on Current (mA)(I _{Fon})		0.5-2		0.5-2		0.5-2		0.5-2	
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})	Max	30	50	30	50	30	50	30	50
	Typ	18	25	18	25	18	25	18	25
Off-state leakage current (µA) (I _{LK})		1	10	1	10	1	10	1	10
Turn-on (msec)(T _{ON})	Max	1	0.2	1	0.2	1	0.2	1	0.2
	Typ	0.4	0.03	0.4	0.03	0.4	0.03	0.4	0.03
Turn-off (msec)(T _{OFF})	Max	0.2	1	0.2	1	0.2	1	0.2	1
	Typ	0.03	0.4	0.03	0.4	0.03	0.4	0.03	0.4
Capacitance (pF)(C _{OUT})		130	240	130	240	130	240	130	240
Input / Output Characteristics									
I/O Capacitance (pF)(C _{I/O})		5		5		5		5	
I/O Isolation voltage (VAC)(V _{I/O})	SOP	2500		3000		2500		3000	
	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)							



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Part Number (4 PIN) (6 PIN) (8 PIN)	DIP	EPR	211A354000L	211A354001L	211A354009L	211A404000L	211A404009L
			212A358000L	212A358001L	212A358009L	212A408000L	212A408009L
	SMD		311A354X00L	311A354X01L	311A354X09L	311A404X00L	311A404X09L
			312A358X00L	312A358X01L	312A358X09L	312A408X00L	312A408X09L
	SOP		411A354X00L	411A354X01L	411A354X09L	411A404X00L	411A404X09L
			412A358X00L	412A358X01L	412A358X09L	412A408X00L	412A408X09L
Contact form	4PIN	1A	1A	1A	1A	1A	
	8PIN	2A	2A	2A	2A	2A	
Input Characteristics							
LED turn on Current (mA)(I _{Fon})	0.5-2		0.5-2	0.5-2	0.5-2	0.5-2	
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	100	100	100	
	SMD/DIP	120	100	120	120	120	
Peak current (mA)(I _{L-Peak})	SOP	250	250	250	250	250	
	SMD/DIP	300	250	300	300	300	
On-state resistance Max. (Ω)(R _{ON})	Max	35	55	35	35	22	
	Typ	27	30	27	27	16	
Off-state leakage current (µA) (I _{LK})	1		1	1	1	1	
Turn-on (msec)(T _{ON})	Max	3	3	3	3	3	
	Typ	1	1	1	1	1	
Turn-off (msec)(T _{OFF})	Max	0.2	0.2	0.2	0.2	0.2	
	Typ	0.05	0.05	0.05	0.05	0.05	
Capacitance (pF)(C _{OUT})	130		130	130	130	160	
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	2500	2500	3000	2500	3000	
	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)					



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Part Number (4 PIN) (6 PIN) (8 PIN)	DIP	EPR	211AF06000	211AH06000		
	SMD		311AF06X00	311AH06X00		
	SOP			411AH06X00		
Contact form	4PIN / 6PIN		1A	1A		
	8PIN		---	---		
Input Characteristics						
LED turn on Current (mA)(I _{Fon})			0.5-2	0.5-2		
Reverse voltage at 10μA (V)(V _R)			5	5		
Control current (mA)(I _F)			5-50	5-50		
Output Characteristics						
Load voltage (V)(AC peak or DC)(V _L)			1500	1700		
Continuous rated load current (mA)(I _L)	SOP		---	---		
	SMD/DIP		30	45		
Peak current (mA)(I _{L-Peak})	SOP		---	---		
	SMD/DIP		100	100		
On-state resistance Max. (Ω)(R _{ON})	Max		220	110		
	Typ		180	90		
Off-state leakage current (μA) (I _{LK})			1	1		
Turn-on (msec)(T _{ON})	Max		1.5	1.5		
	Typ		1	1		
Turn-off (msec)(T _{OFF})	Max		1	1		
	Typ		0.2	0.2		
Capacitance (pF)(C _{OUT})			95	95		
Input / Output Characteristics						
I/O Capacitance (pF)(C _{I/O})			5	5		
I/O Isolation voltage (VAC)(V _{I/O})	SOP		---	---		
	SMD/DIP		3750	3750		
I/O Isolation resistance (GΩ)(R _{I/O})			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)				