

## Photo DMOS-FET Relay Specifications

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[Http://www.100y.com.tw](http://www.100y.com.tw)

**Part Name: LT215**

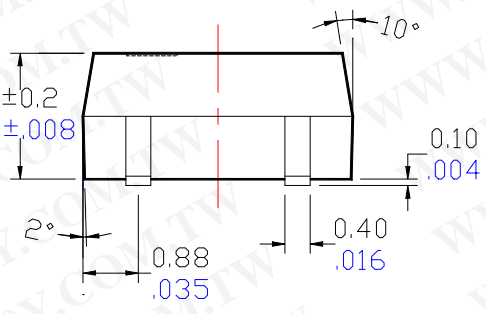
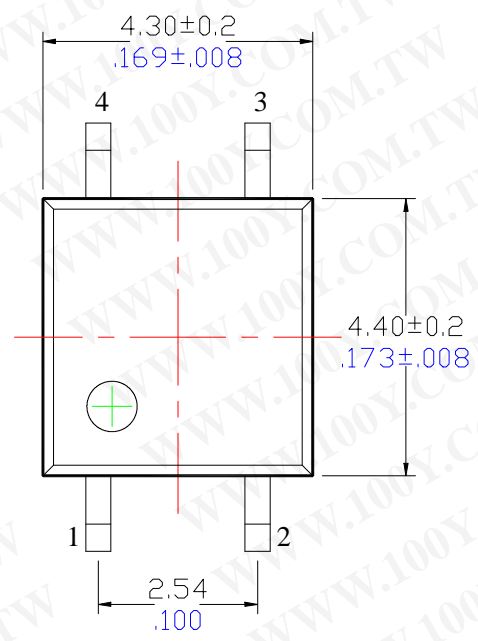
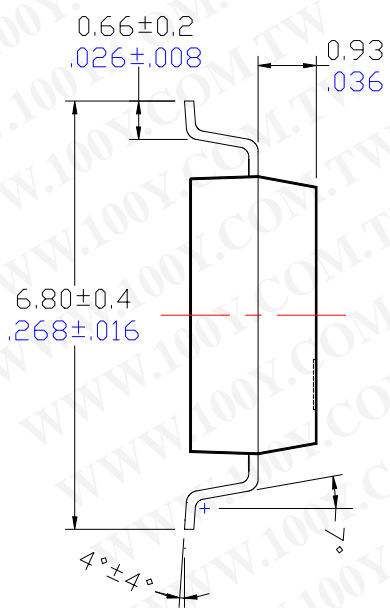
(Load voltage: 60V / Load current: 400mA)

### Absolute Maximum Ratings (Ambient Temperature: 25°C)

Item		Symbol	Value	Units	Note
Input	Continuous LED Current	I <sub>F</sub>	50	mA	
	Peak LED Current	I <sub>FP</sub>	1000	mA	f=100Hz, duty=1%
	LED Reverse Voltage	V <sub>R</sub>	5	V	
	Input Power Dissipation	P <sub>In</sub>	75	mW	
Output	Load Voltage	V <sub>L</sub>	60	V(AC peak or DC)	
	Load Current	I <sub>L</sub>	400	mA	
	Peak Load Current	I <sub>Peak</sub>	1.0	A	100ms(1 pulse)
	Output Power Dissipation	P <sub>out</sub>	400	mW	
Total Power Dissipation		P <sub>T</sub>	450	mW	
I/O Breakdown Voltage		V <sub>I/O</sub>	1500	V <sub>rm</sub>	RH=60%, 1min
Operating Temperature		T <sub>Opr</sub>	-40 to +85	°C	
Storage Temperature		T <sub>Stg</sub>	-40 to +100	°C	
Pin Soldering Temperature		T <sub>Sol</sub>	260	°C	10 sec max.

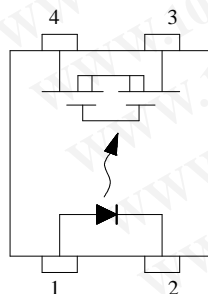
### Electrical Specifications (Ambient Temperature: 25°C)

Item		Symbol	MIN.	TYP.	MAX.	Units	Conditions
Input	LED Forward Voltage	V <sub>F</sub>		1.2	1.4	V	I <sub>F</sub> =10mA
	Operation LED Current	I <sub>F On</sub>		0.5	3	mA	
	Recovery LED Current	I <sub>F Off</sub>		0.35	0.5	mA	
	Recovery LED Voltage	V <sub>F Off</sub>	0.5			V	
Output	On-Resistance	R <sub>On</sub>		0.8	2	Ω	I <sub>F</sub> =5mA, I <sub>L</sub> =100mA, Time to flow is within 1 sec.
	Off-State Leakage Current	I <sub>Leak</sub>			1	μA	V <sub>L</sub> =Rating
	Output Capacitance	C <sub>Out</sub>		115		pF	V <sub>L</sub> =0, f=1MHz
Transmis sion	Turn-On Time	T <sub>On</sub>		0.65	2	ms	I <sub>F</sub> =5mA, I <sub>L</sub> =100mA
	Turn-Off Time	T <sub>Off</sub>		0.08	0.2	ms	
Coupled	I/O Isolation Resistance	R <sub>I/O</sub>	10 <sup>9</sup>			Ω	DC500V
	I/O Capacitance	C <sub>I/O</sub>		0.8	1.5	pF	f=1MHz



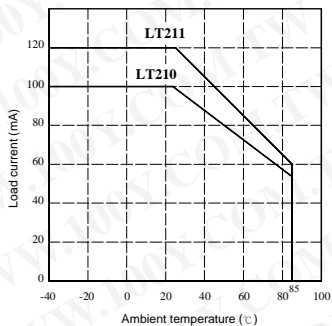
Unit : mm inch  
Tolerance: ±0.1 ±.004

### Schematic

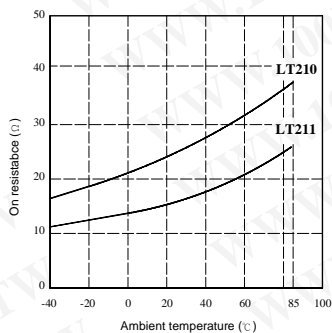


1. LED Anode
2. LED Cathode
3. MOS FET
4. MOS FET

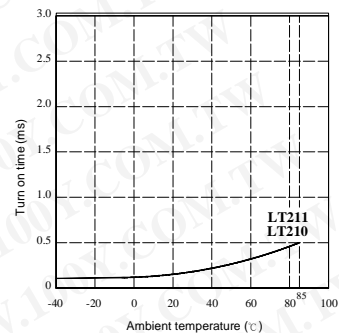
Load current Vs. Ambient temperature



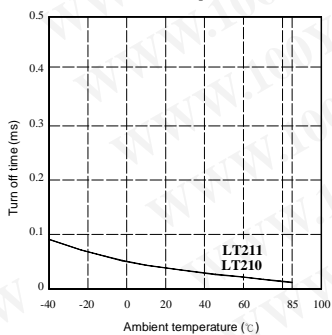
On resistance Vs. Ambient temperature



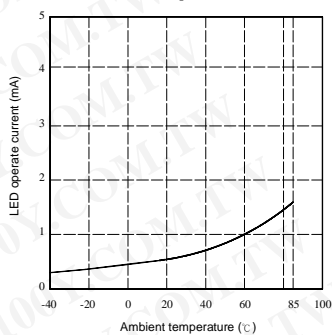
Turn on time Vs. Ambient temperature



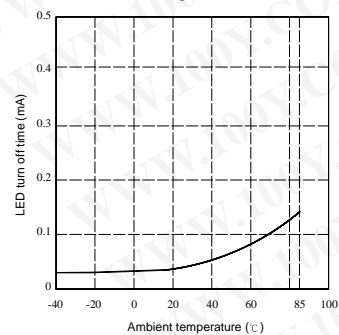
Turn off time Vs. Ambient temperature



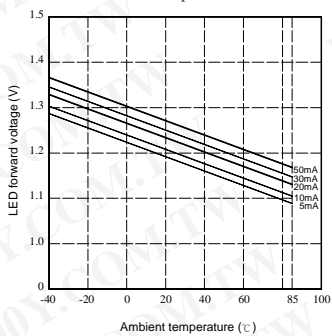
LED operate current Vs. Ambient temperature



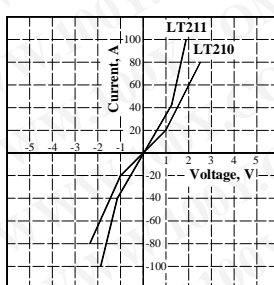
LED turn off current Vs. Ambient temperature



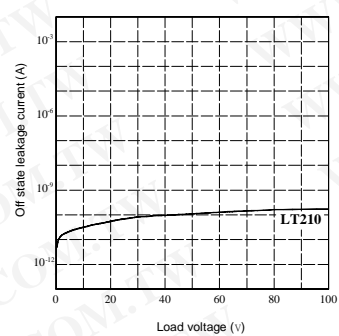
LED forward voltage Vs. Ambient temperature



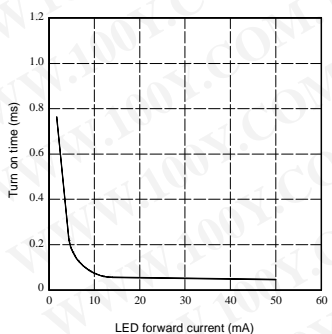
Voltage Vs. current characteristics of output at MOS portion



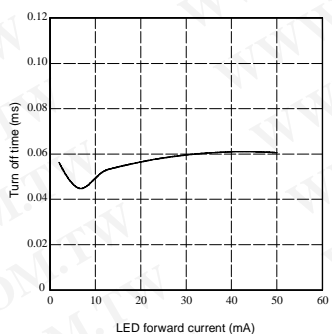
Off state leakage current



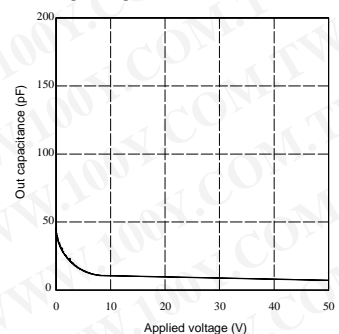
LED forward current Vs. turn on time characteristics

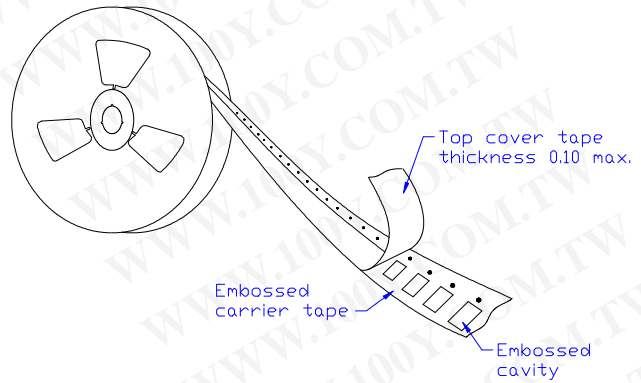
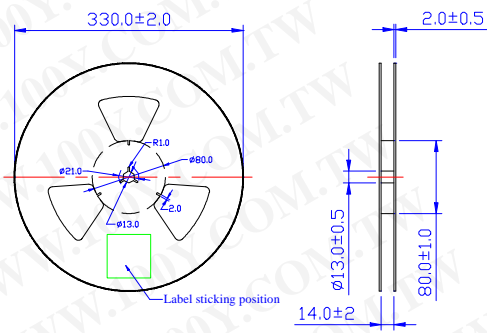


LED forward current Vs. turn off time characteristics

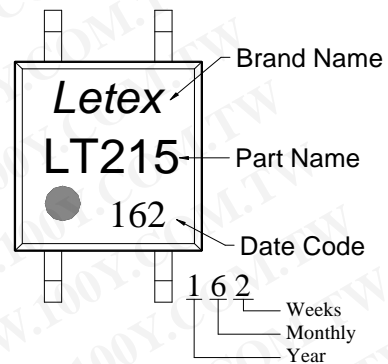
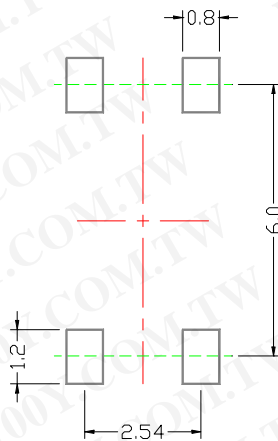
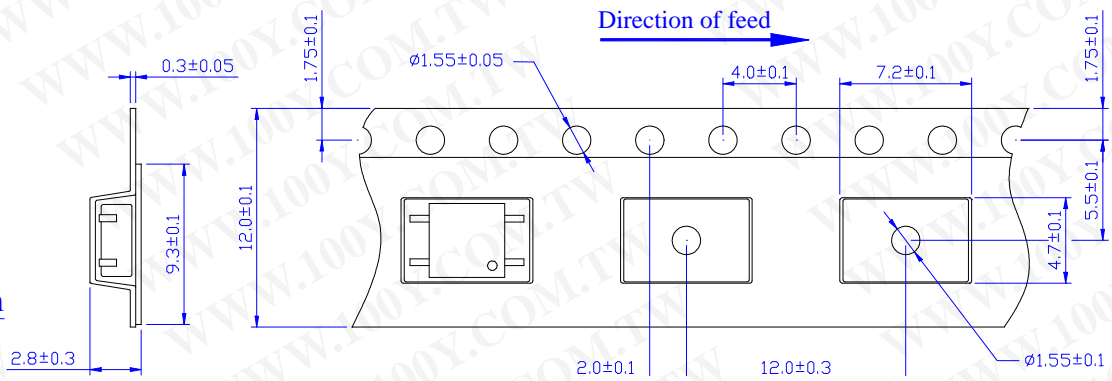


Applied voltage Vs. output capacitance characteristics





Unit : mm



- Note:
1. There shall be 400 mm of leader minimum what may consist of carrier and cover tape follower.
  2. Devices are pockets in accordance with IEC standard IEC286-3 (JIS C 0806) and specifications given above.
  3. Packaging : 2,000pcs per reel, 2 reel per box, 5 boxes per carton.