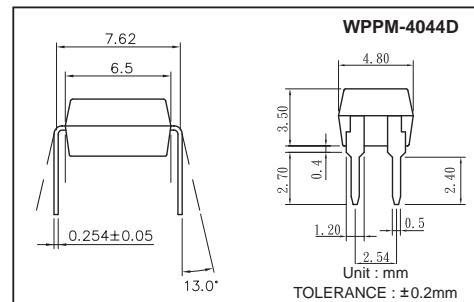




Features

1. Normally close, single pole single throw.
2. Control 400VAC or DC voltage.
3. Switch 130mA loads.
4. LED control current, 5mA.
5. Low ON-resistance.
6. dv/dt, >500V/mS.
7. Isolation test voltage, 3750VRMS.

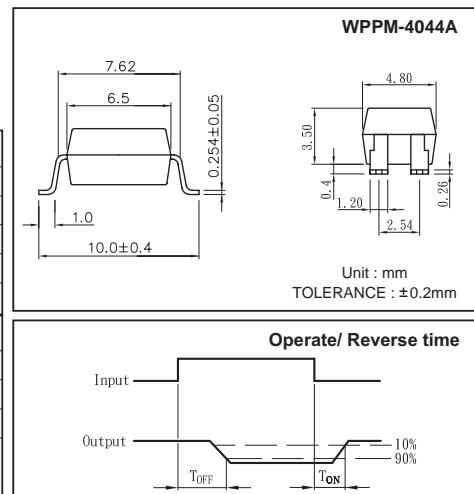


Part Numbering System & Part Marking System: Page 3 & 4.

Absolute Maximum Ratings

(Ta=25°C)

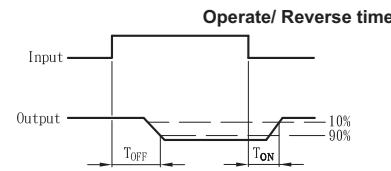
Emitter (Input)	Detector (Output)
Reverse Voltage.....	5.0V
Continuous Forward Current	50mA
Peak Forward Current	1A
Power Dissipation	100mW
Derate Linearly from 25°C	1.3mW/°C
General Characteristics	
Isolation Test Voltage.....	3750VRMS
Isolation Resistance	Operating Temperature Range ...-40°C to +125°C
VIO = 500V, TA = 25°C	Junction Temperature.....100°C
Total Power Dissipation	Soldering Temperature,
Derate Linearly from 25°C	2mm from case, 10 sec260°C



Electro-optical Characteristics

(Ta=25°C)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Emitter (Input)						
Forward Voltage	VF	IF =10mA		1.2	1.5	V
Operation Input Current	I _{OFF}	VL =±20V, IL ≤ 5uA		5		mA
Recovery Input Current	I _{ON}	VL =±20V, IL =100mA, t =10mS	0.2			mA
Detector (Output)						
Output Breakdown Voltage	V _B	I _B =50uA	400			V
Output Off-State Leakage	I _{OFF}	VT =100V, If =0mA		0.2	2	uA
I/O Capacitance	C _{ISO}	If =0, f =1MHz		6		pF
ON Resistance	R _{ON}	IL =100mA, If =10mA		40	50	Ω
Reverse (ON) Time	T _{ON}	If =10mA, VL =±20V		0.6	1.5	mS
Operate (OFF) Time	T _{OFF}	t =10mS, IL =±100mA		0.3	1.0	mS



MOS Relay Schematic and Wiring Diagrams

Type	Schematic	Output configuration	Load	Connection	Wiring Diagrams
4044D & 4044A		1b	AC/DC	—	

Data Curve

Fig.1 Load current vs. ambient temperature
Allowable ambient temperature:
-40°C to +85°C

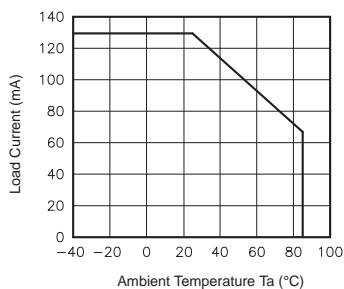


Fig.2 On resistance vs. ambient temperature
Across terminals 3 and 4 pin
LED current: 0mA
Continuous load current: 130mA(DC)

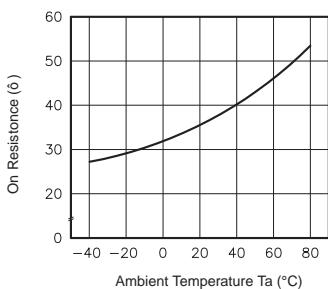


Fig.3 Operate (OFF) time vs. ambient temperature
Load voltage 400V(DC)
LED current: 5mA
Continuous load current: 130mA(DC)

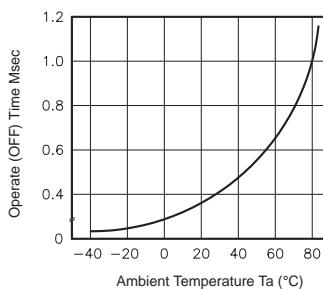


Fig.4 Reverse (ON) time vs. ambient temperature; LED current: 5mA;
Load voltage: 400V(DC)
Continuous load current: 130mA(DC)

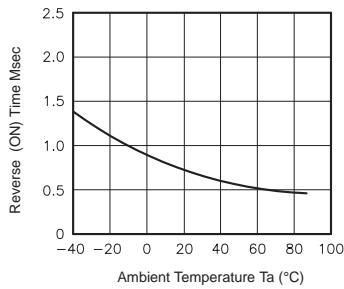


Fig.5 LED operate (OFF) vs. ambient temperature
Load voltage: 400V(DC)
Continuous load current: 130mA(DC)

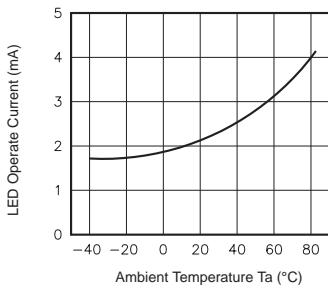


Fig.6 LED reverse (ON) current vs. ambient temperature
Load voltage 400V(DC)
Continuous load current: 130mA(DC)

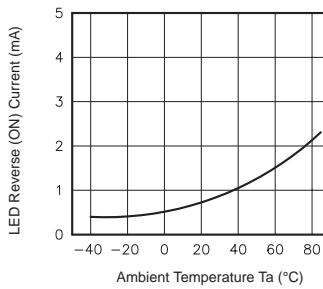


Fig.7 LED dropout voltage vs. ambient temperature
LED current: 5 to 50mA

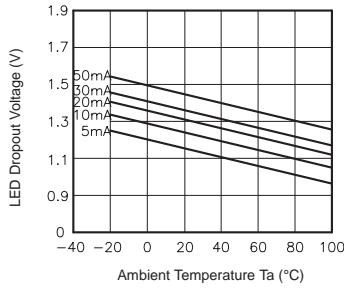


Fig.8 Voltage vs. current characteristics of output at MOS FET portion
Measured portion: across terminals 3 and 4 pin
Ambient temperature: 25°C

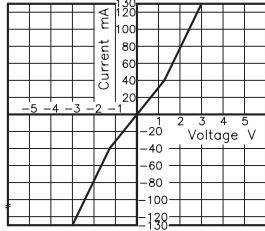


Fig.9 Off state leakage current
Across terminals 3 and 4 pin
Ambient temperature: 25°C

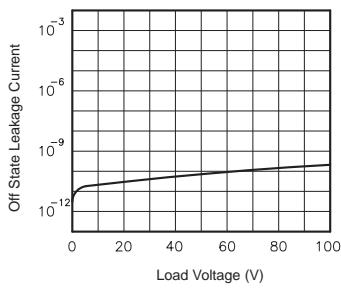


Fig.10 LED forward current vs. operate (OFF) time
Across terminals 3 and 4 pin;
Load voltage: 400V (DC);
Continuous load current: 130mA (DC);
Ambient temperature: 25°C

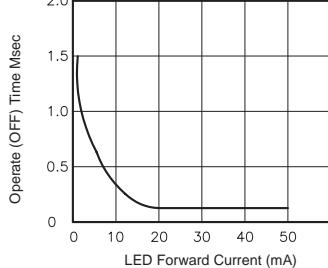


Fig.11 LED forward current vs. reverse (ON) time
Across terminals 3 and 4 pin;
Load voltage: 400V (DC);
Continuous load current: 130mA (DC);
Ambient temperature: 25°C

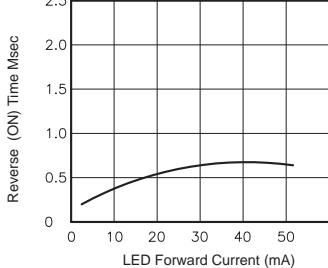


Fig.12 Applied voltage vs. output capacitance
Across terminals 3 and 4 pin
Frequency: 1MHz
Ambient temperature: 25°C

