■ Product Images

DIP8

SMD8

■ Features

- Contact Form: 2a
- Load Voltage: 60V
- Load Current: 200mA
- Low Off-State Leakage Current: 1μA

■ Application

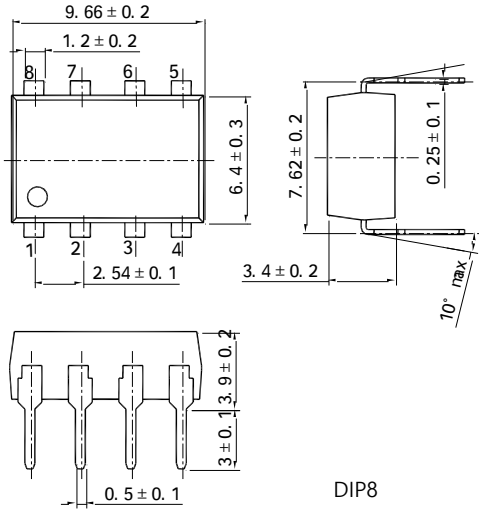
- Automatic Test Equipment
- Telephone Equipment
- Sensing Equipment
- Security Equipment
- I/O Modules
- Modem

■ Types

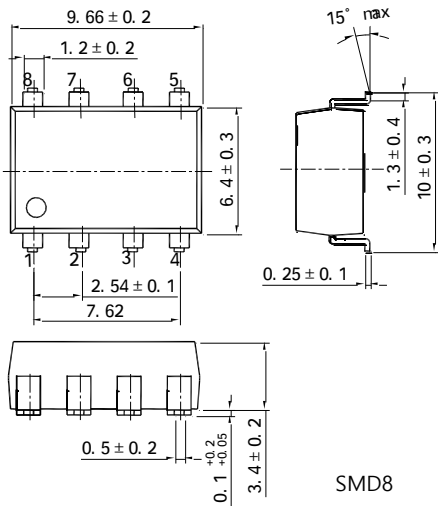
Output Rating		Marking model	Part Number	
Load voltage	Load current		DIP	SMD
60V	200mA	MJW212E	MJW212E	MJW212EA

Note: The "A" indicating the pin type is not marked on the product. Please refer to the ordering example model number when placing an order.

■ Dimensions

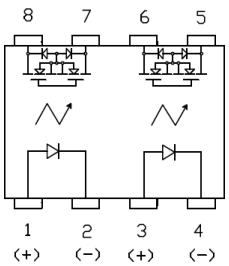


DIP8

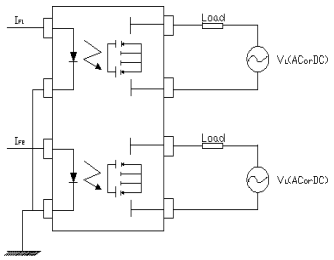


SMD8

■ Terminal Identification



■ Wiring Diagram



[Technical parameters (Ambient Temperature 25℃)]

■ I/O Absolute Maximum Ratings

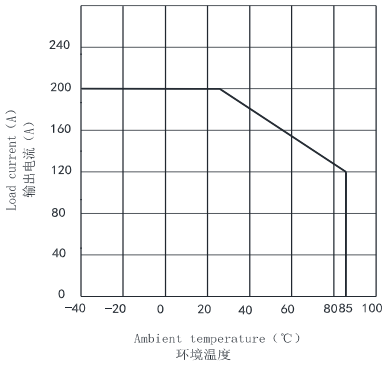
Item			Symbol	MJW212E
Operating Temperature			T_{OPR}	-40℃ ~ +85℃
Storage Temperature			T_{STG}	-40℃ ~ +100℃
Input	Continuous LED Current	MAX.	I_F	50mA
	Peak LED Current LED (f=100Hz,Duty=1%)	MAX.	I_{FP}	1000mA
	LED Reverse Voltage	MAX.	V_R	5V
	Input Power Dissipation	MAX.	P_{IN}	75mW
Output	Load Voltage	MAX.	V_L	60V(AC peak or DC)
	Load Current	MAX.	I_L	200mA
	Peak Load Current(100ms,1shot)	MAX.	I_{PEAK}	600mA
	Output Power Dissipation	MAX.	P_{OUT}	800mW
Total Power Dissipation		MAX.	P_T	850mW
I/O Breakdown Voltage		MAX.	$V_{I/O}$	3750Vrms
I/O Breakdown Voltage (Add H)		MAX.	$V_{I/O}$	5000Vrms

■ Electrical Specifications

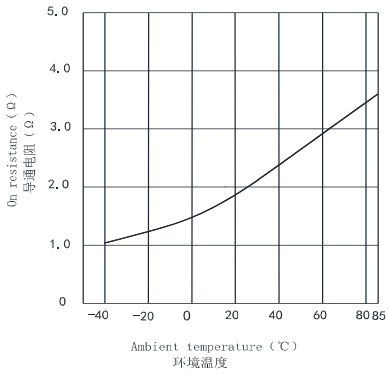
Item			Symbol	MJW212E	Conditions
Input	LED Forward Voltage	TYP.	V_F	1.3V	I_F=10mA
		MAX.		1.5V	
	Operation LED Current	TYP.	$I_{F\ ON}$	0.5mA	
		MAX.		2mA	
	Recovery LED Voltage	MIN.	$V_{F\ OFF}$	0.7V	
Output	On-Resistance	TYP.	R_{ON}	2Ω	I_F=5mA,I_L= Rating, within 1 sec.
		MAX.		8Ω	
	Off-State Leakage Current	MAX.	I_{LEAK}	1μA	V_L=Rating
	Output Capacitance	TYP.	C_{OUT}	115pF	V_L=0V,f=1MHz
Time parameters	Turn-On Time	TYP.	T_{ON}	0.5ms	I_F=5mA,I_L=100mA
		MAX.		1ms	
	Turn-Off Time	TYP.	T_{OFF}	0.05ms	
		MAX.		0.5ms	
I/O	I/O Insulation Resistance	MIN.	$R_{I/O}$	1000MΩ	DC500V
	I/O Capacitance	TYP.	$C_{I/O}$	0.8pF	f=1MHz

■ Characteristic curve

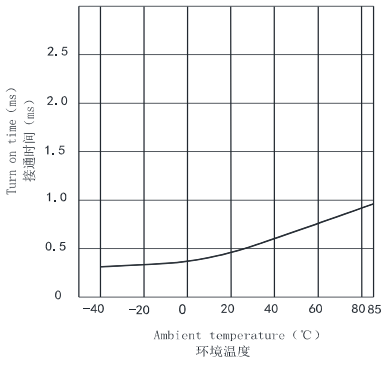
Load current Vs. Ambient temperature
输出电流-环境温度曲线



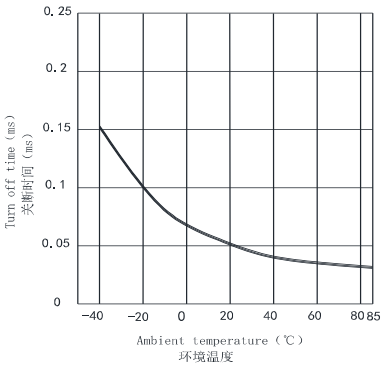
On resistance Vs. Ambient temperature
导通电阻-环境温度曲线



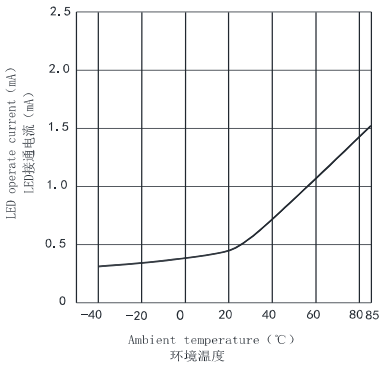
Turn on time Vs. Ambient temperature
接通时间-环境温度曲线



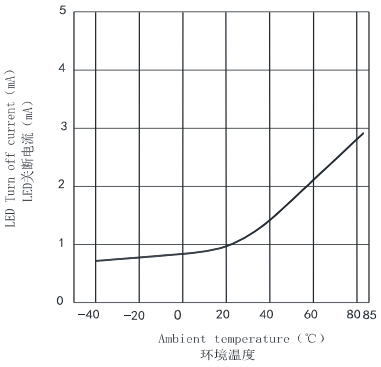
Turn off time Vs. Ambient temperature
关断时间-环境温度曲线



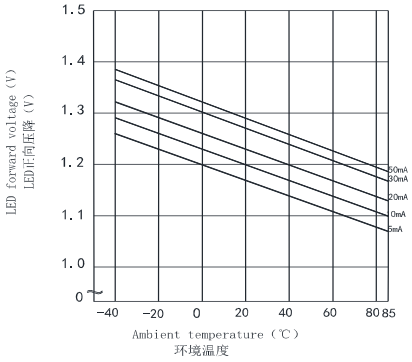
LED operate current Vs. Ambient temperature
接通电流-环境温度曲线



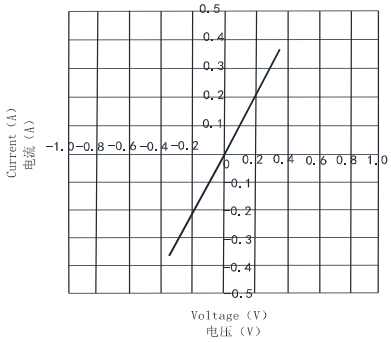
LED turn off current Vs. Ambient temperature
关断电流-环境温度曲线



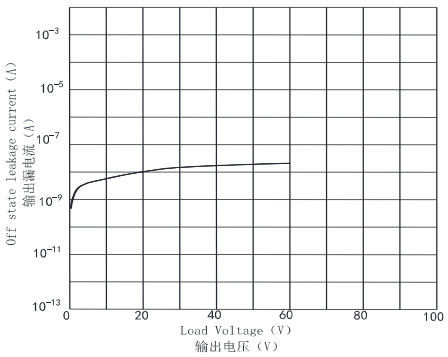
LED forward voltage Vs. Ambient temperature
LED正向电压-环境温度曲线



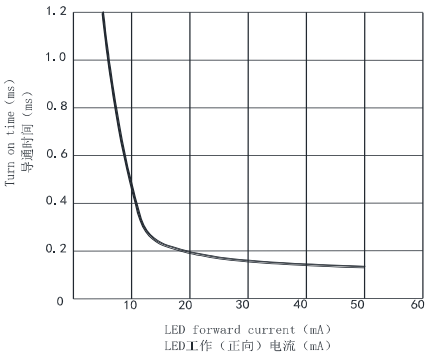
Voltage Vs. current characteristics of output at MOS portion
MOS管输出电压-输出电流曲线



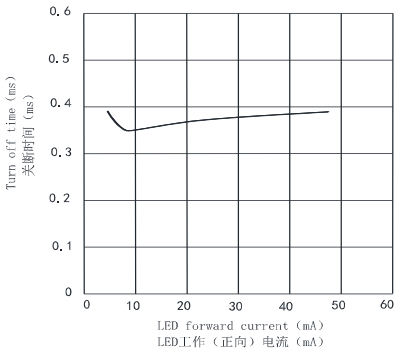
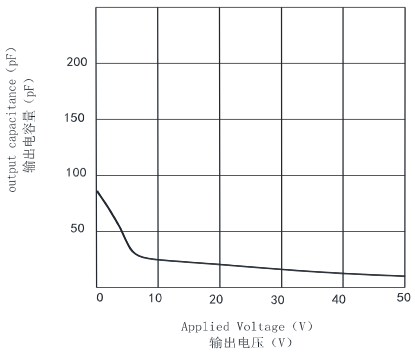
Off state leakage current Vs. Load voltage characteristics
输出漏电流-输出电压曲线



LED forward current Vs. turn on time characteristics
LED正向（工作）电流-导通时间曲线



LED forward current Vs. turn off time characteristics
LED正向（工作）电流-关断时间曲线



Applied voltage Vs. output capacitance characteristics
输出电压-输出电容曲线