

M211 Solid State Relay

■ DESCRIPTION

The M211 is a bi-directional, single-pole, single-throw, normally open multipurpose solid-state relay in a miniature 4-pin small outline package. It is designed to replace electromechanical relays in general purpose switching applications. The relay consists of an integrated circuit that drives two rugged source-to-source enhancement type DMOS transistors - optically coupled to a light emitting diode. The output MOS transistors are protected with free-wheeling diodes that can handle up to 1.5A of inrush current, making the relay ideal for switching lamps and highly inductive loads.

■ FEATURES

- High input-to-output isolation
- Low input control power consumption
- 100mA maximum continuous load current
- 35 ohms maximum on-resistance
- Long life/high reliability
- Ultra miniature 4-pin small outline package

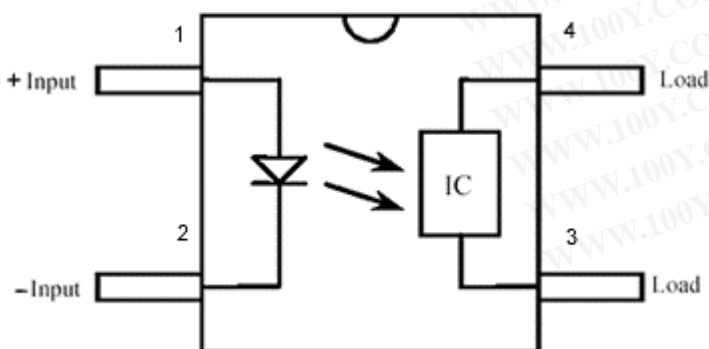
■ Application

- Telecom switching
- Tip/Ring control
- PCMCIA modules
- Multiplexers
- Meter reading systems
- Data acquisition
- Medical equipment
- Battery monitoring
- Home/Safety security systems

■ OPTIONS/SUFFIXES

-TR Tape and Reel

■ SCHEMATIC DIAGRAM



■ **MAXIMUM RATINGS** 最大额定参数

PARAMETER	UNIT	MIN	TYP	MAX
Storage Temperature 储存温度	° C	-55	---	125
Operating Temperature 工作温度	° C	-40	---	85
Continuous Input Current 持续输入电流	mA	---	---	40
Transient Input Current 瞬间输入电流	mA	---	---	400
Reverse Input Control Voltage 回流输入控制电压	V	6	---	---
Output Power Dissipation 输出功率消耗	mW	---	---	400

■ **APPROVALS** 认证

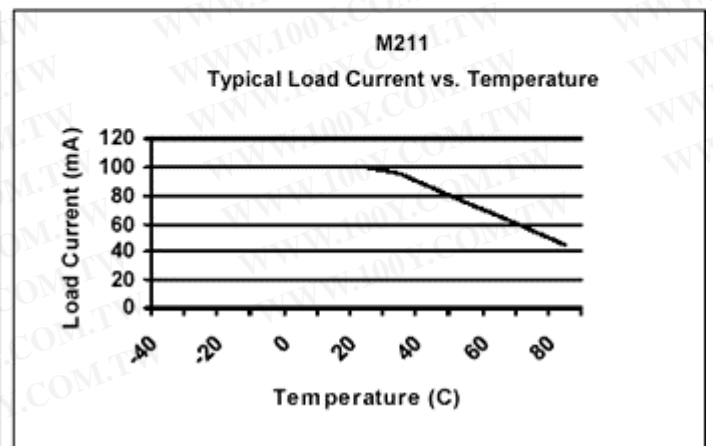
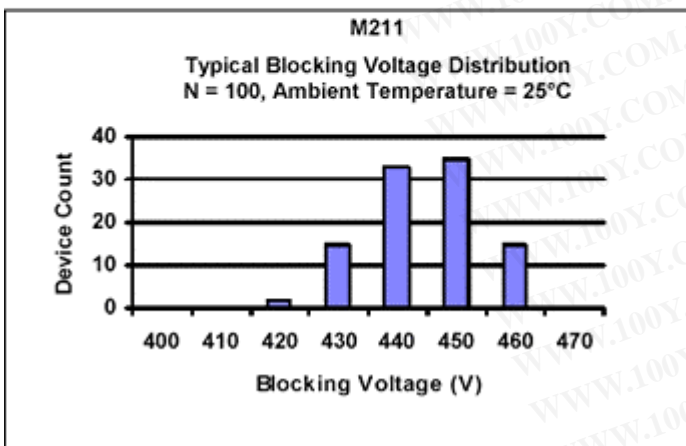
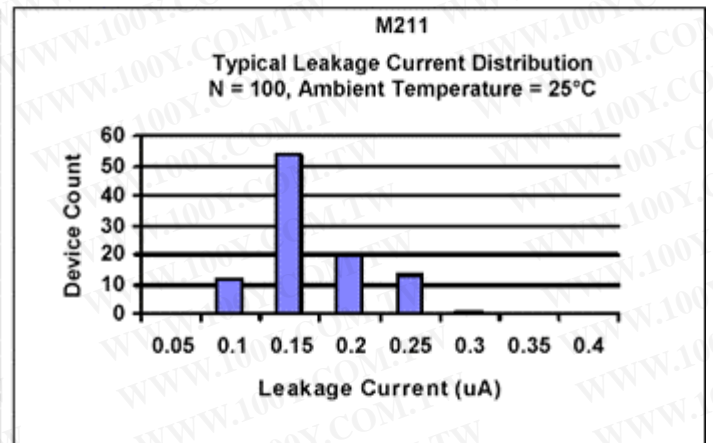
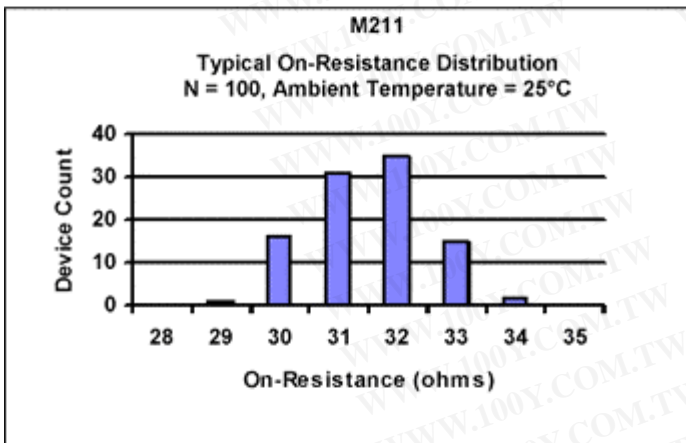
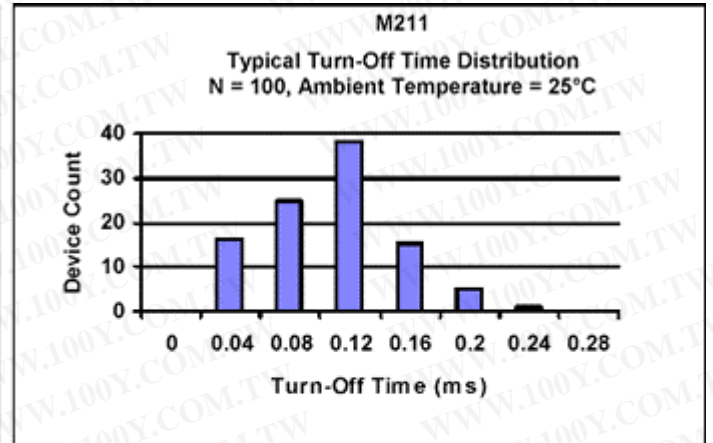
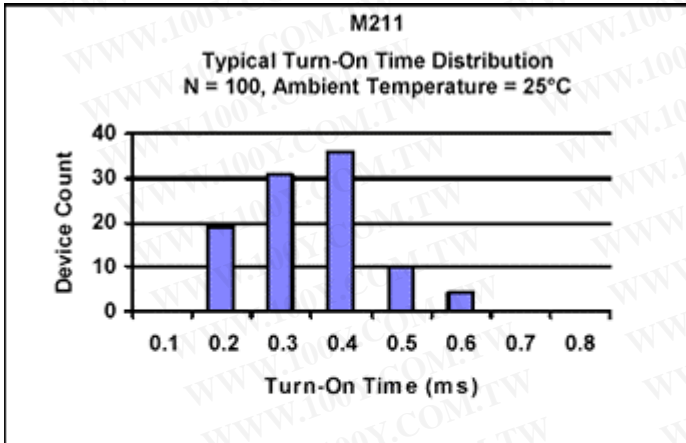
BABT CERTIFICATE #650192:
 BS EN 60950, BS EN 41003, BS EN 60065

■ **ELECTRICAL CHARACTERISTICS - 25°C** 电气特性

PARAMETER	UNIT	MIN	TYP	MAX	TEST CONDITIONS
INPUT SPECIFICATIONS 输入规格	---	---	---	---	---
LED Forward Voltage 发光二极管运送电压	V	---	1.2	1.5	If = 10mA
LED Reverse Voltage 发光二极管回流电压	V	6	12	---	Ir = 10uA
Turn-On Current 接通时间	mA	5	2.5	---	Io = 100mA
Turn-Off Current 关闭时间	mA	---	0.5	---	---
OUTPUT SPECIFICATIONS 输出规格	---	---	---	---	---
Blocking Voltage 阻拦电压	V	400	---	---	Io = 10uA
Continuous Load Current 持续负载电流	mA	---	---	100	If = 5mA
On-Resistance 阻抗	Ω	---	30	35	Io = 100mA
Leakage Current 漏电流	μ A	---	0.2	10	Vo = 400V
Output Capacitance 输出电容	pF	---	25	50	Vo = 25V, f = 1.0MHz
Offset Voltage 垂距电压	mV	---	---	0.2	If = 5mA
COUPLED SPECIFICATIONS 结合规格	---	---	---	---	---
Isolation Voltage 绝缘电压	V	1500	---	---	T = 1 minute
Turn-On Time 接通时间	ms	---	1	2	If = 5mA, Io = 100mA

Turn-Off Time 关闭时间	ms	---	0.1	0.5	If = 5mA, Io = 100mA
Isolation Resistance 绝缘电阻	G Ω	100		---	---
Coupled Capacitance 结合电容	p F	---	2	---	---
Contact Transient Ratio 连接瞬间功率	V / μ s	2000	7000	---	dV = 50V

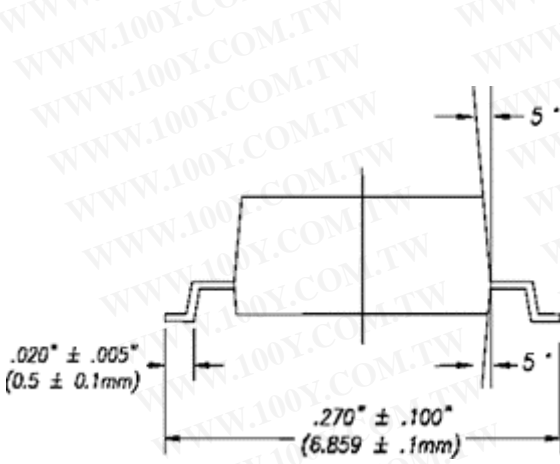
■ PERFORMANCE DATA 性能数据



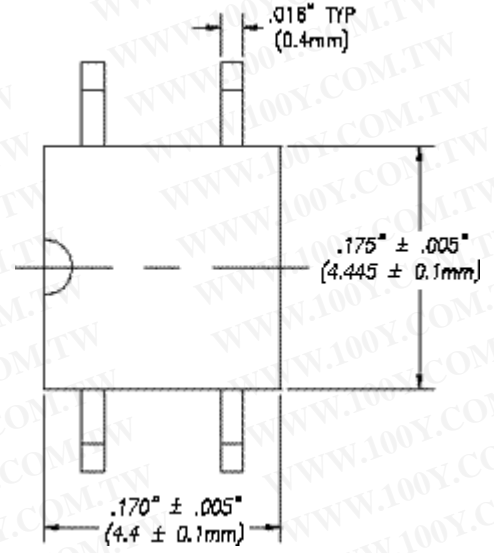
勝特力材料 886-3-5753170
勝特力电子(上海) 86-21-54151736
勝特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)

MECHANICAL DIMENSIONS

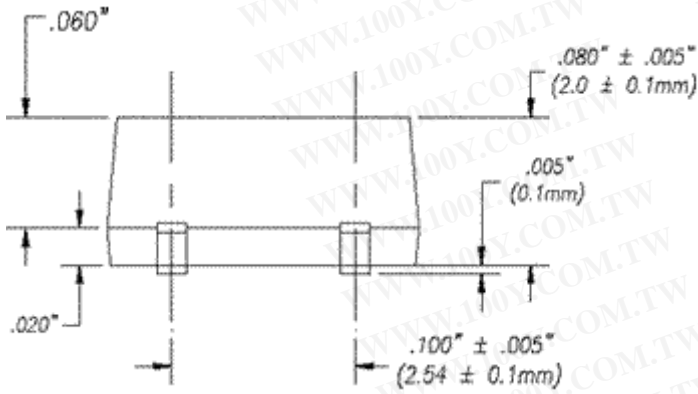
4 PIN SMALL OUTLINE PACKAGE



END VIEW



TOP VIEW



BACK VIEW