



ISOCOM
COMPONENTS

IS215

Small Outline Photo DMOS-FET Relay with high load current capabilities

DESCRIPTION

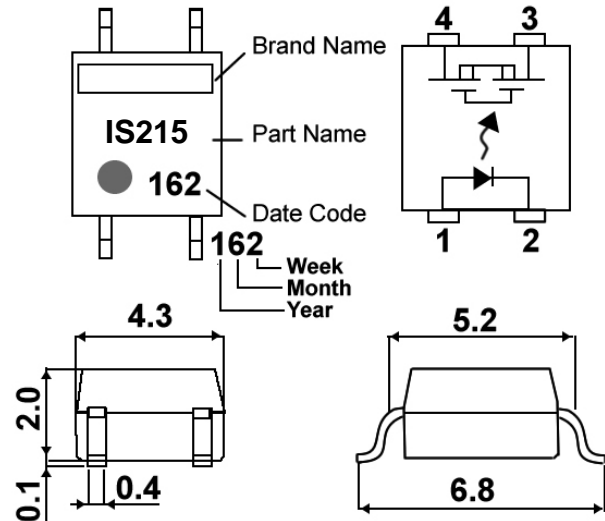
The IS215 is a miniature 1-Form A solid state relay in a 4 pin SOP package. The IS215 utilises MOSFET technology that is optically coupled to a highly efficient GaAlAs infrared light emitting diodes.

FEATURES

- SOP 4 pin package for compact PCB's
- High load capability (400mA)
- Lower driver power requirements
- No moving parts
- High reliability
- Arc-Free without snubbing circuits
- 1500Vrms Input/Output voltage
- All electrical parameters 100% tested
- Custom electrical selections available

APPLICATIONS

- Telecommunications
- Industrial systems controllers
- Measuring instruments
- Security Equipment
- Signal transmission between systems of different potentials and impedances



ABSOLUTE MAXIMUM RATINGS (25°C unless otherwise specified)

Storage Temperature	-40°C to+ 100°C
Operating Temperature	-40°C to + 85°C
Lead Soldering Temperature	260°C

INPUT DIODE

Forward Current	50mA
Reverse Voltage	5V
Power Dissipation	75mW

OUTPUT MOSFET

Load Voltage	60V
Load Current	400mA
Output Power dissipation	400mW

POWER DISSIPATION

Total Power Dissipation	450mW
(derate linearly 7.5mW/°C above 25°C)	



ISOCOM
COMPONENTS

ISOCOM COMPONENTS LTD
Unit 25B, Park View Road West,
Park View Industrial Estate
Hartlepool, TS25 1YD England Tel: (01429)863609
Fax : (01429) 863581 e-mail sales@isocom.co.uk
<http://www.isocom.com>

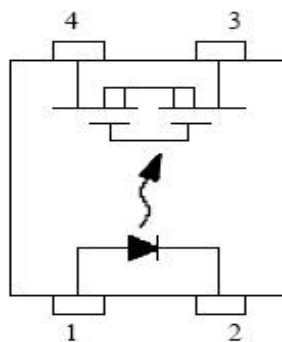
ISOCOM COMPONENTS ASIA LTD
Hong Kong Office, 1712-1713
Laurels Industrial Centre, 32 Tai Yau Street,
San Po Kong, Kowloon, Hong Kong.
Tel: +852 2995 9217 Fax : +852 8161 6292
e-mail sales@isocom.com.hk

ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ Unless otherwise noted)

PARAMETER		MIN	TYP	MAX	UNITS	TEST CONDITION
Input	Forward Voltage (V_F)		1.2	1.4	V	$I_F = 10\text{mA}$
	Reverse Current (I_R)			10	μA	$V_R = 5\text{V}$
Output	On State Resistance (R_{on})		0.8	2	Ω	$I_F = 5\text{mA}, I_L = 100\text{mA}$
	Off State Leakage Current (I_{Leak})			1	μA	$V_L = \text{Rating}$
	Output Capacitance (C_{Out})		115		pF	$V_L = 0, f = 1\text{MHz}$
Coupled	Input Control Current (I_{FON})		0.5	3.0	mA	
	Recovery LED Current (I_{FOFF})		0.35	0.5	mA	
	Recovery LED Voltage (V_{OFF})	0.5			V	
	Turn On Time (T_{ON})		0.65	2.0	mS	$I_F = 5\text{mA}, I_L = 100\text{mA}$
	Turn Off Time (T_{OFF})		0.08	0.2	mS	$I_F = 5\text{mA}, I_L = 100\text{mA}$
	Input to Output Isolation (V_{ISO})	1500			V	See note 1

Note 1 Measured with input leads shorted together and output leads shorted together.

Note 2 Special Selections are available on request. Please consult the factory.



- 1 LED Anode
- 2 LED Cathode
- 3 Drain MOSFET
- 4 Drain MOSFET

