

# FK8V03040L

## Silicon N-channel MOSFET

For lithium-ion secondary battery protection circuit

For DC-DC Converter

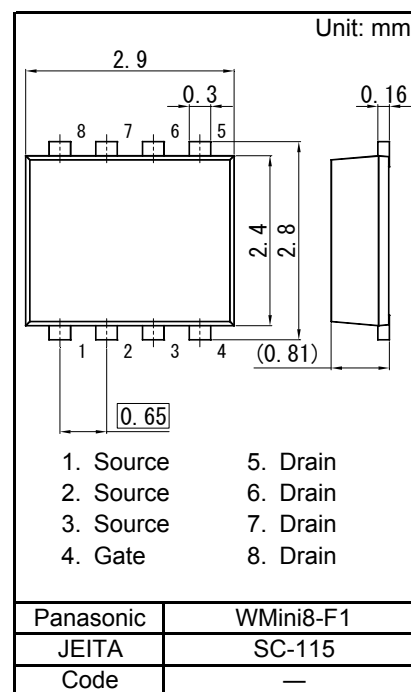
### ■ Features

- Low drain-source On-state Resistance  
RDS(on) typ = 11 mΩ (VGS = 4.5 V)
- High-speed switching : Qg = 7.2 nC
- Halogen-free / RoHS compliant  
(EU RoHS / UL-94 V-0 / MSL:Level 1 compliant)

### ■ Marking Symbol: 3D

### ■ Packaging

Embossed type (Thermo-compression sealing) : 3 000 pcs / reel (standard)



- |           |          |
|-----------|----------|
| 1. Source | 5. Drain |
| 2. Source | 6. Drain |
| 3. Source | 7. Drain |
| 4. Gate   | 8. Drain |

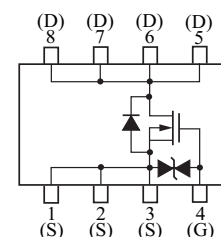
### ■ Absolute Maximum Ratings Ta = 25 °C

Parameter	Symbol	Rating	Unit
Drain-source Voltage	VDS	33	V
Gate-source Voltage	VGS	±20	V
Drain Current (Steady State) <sup>*1</sup>	ID	10	A
Drain Current (t = 10 s) <sup>*1</sup>		12	
Drain Current (Pulsed) <sup>*1,*2</sup>		40	
Source Current (Pulsed) (Body Diode) <sup>*1,*2</sup>		ISp (BD)	
Total Power Dissipation (Steady State) <sup>*1</sup>	PD	1	W
Total Power Dissipation (t = 10 s) <sup>*1</sup>		1.5	
Channel Temperature	Tch	150	°C
Operating Ambient Temperature	Topr	-40 to +85	°C
Storage Temperature Range	Tstg	-55 to +150	°C

Note) <sup>\*1</sup> Device mounted on a glass-epoxy board (See Figure 1)

<sup>\*2</sup> Pulse test: Ensure that the channel temperature does not exceed 150°C.

### Internal Connection



### Pin Name

- |           |          |
|-----------|----------|
| 1. Source | 5. Drain |
| 2. Source | 6. Drain |
| 3. Source | 7. Drain |
| 4. Gate   | 8. Drain |

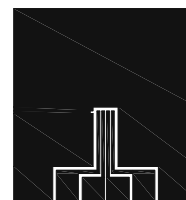


Figure1 FR4 Glass-Epoxy Board  
25.4 mm × 25.4 mm × 0.8 mm