

SK8603190L

Silicon N-channel MOS FET

For Load-switching / For DC-DC Converter

■ Features

- Low Drain-source On-state Resistance : $R_{DS(on)}$ typ = 10 m Ω (VGS = 4.5 V)
- Halogen-free / RoHS compliant
(EU RoHS / UL-94 V-0 / MSL : Level 1 compliant)

■ Marking Symbol : 19

■ Packaging

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

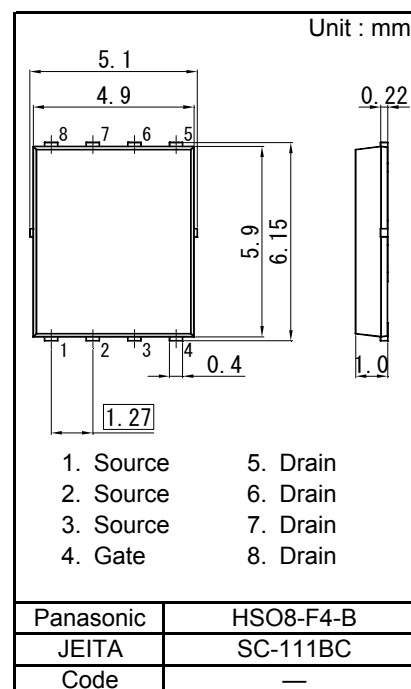
■ Absolute Maximum Ratings Ta = 25 °C

Parameter	Symbol	Rating	Unit	
Drain to Source Voltage	VDS	30	V	
Gate to Source Voltage	VGS	± 20		
Drain Current	ID	Ta = 25 °C, t = 10 s ^{*1}	16	A
		Ta = 25 °C, DC ^{*1}	12	
		Tc = 25 °C	19	
		Pulsed, Tch < 150 °C ^{*2}	48	
Total Power Dissipation	PD	Ta = 25 °C, DC ^{*1}	2.7	W
		Tc = 25 °C	19	
Thermal Resistance	Channel to Ambient	Rth(ch-a)	45	°C / W
	Channel to Case	Rth(ch-c)	6.6	
Channel Temperature	Tch	150	°C	
Operating ambient temperature	Topr	-40 to +85		
Storage Temperature Range	Tstg	-55 to +150		
Avalanche Current (Single pulse) ^{*3}	IAR	8	A	
Avalanche Energy (Single pulse) ^{*3}	EAR	8	mJ	

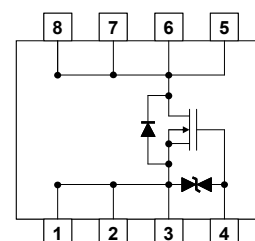
Note *1 Device mounted on a glass-epoxy board in Figure 1

*2 Pulse test: Ensure that the channel temperature does not exceed 150 °C

*3 VDD = 24 V, VGS = 10 to 0 V, L = 0.1 mH, Tch = 25 °C (initial)



Internal Connection



Pin Name

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

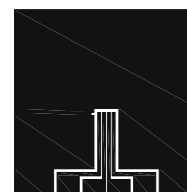


Figure 1 FR4 Glass-Epoxy Board
25.4 mm × 25.4 mm × 0.8 mm