

SK8403170L

Silicon N-channel MOS FET

For Load-switching / For DC-DC Converter

■ Features

- Low Drain-source On-state Resistance : $R_{DS(on)}$ typ = $3.9\text{ m}\Omega$ ($V_{GS} = 4.5\text{ V}$)
- Halogen-free / RoHS compliant
(EU RoHS / UL-94 V-0 / MSL : Level 1 compliant)

■ Marking Symbol : 17

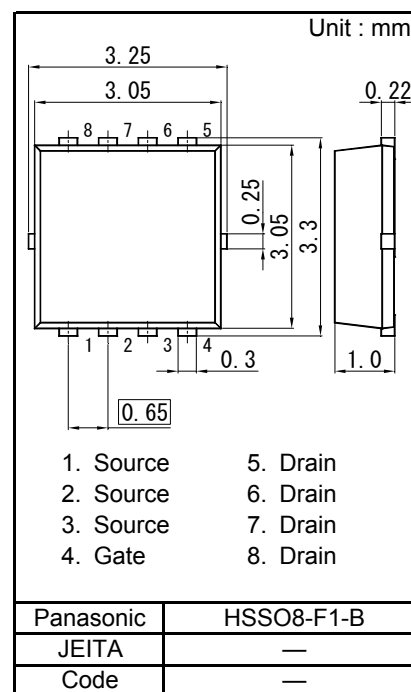
■ Packaging

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

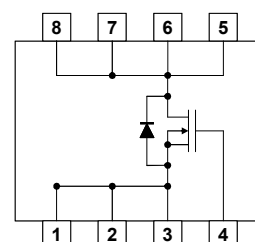
■ Absolute Maximum Ratings $T_a = 25\text{ }^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Drain to Source Voltage	VDS	30	V
Gate to Source Voltage	VGS	± 20	
Drain Current	ID	$T_a = 25\text{ }^\circ\text{C}, t = 10\text{ s}^{*1}$	A
		$T_a = 25\text{ }^\circ\text{C}, \text{DC}^{*1}$	
		$T_c = 25\text{ }^\circ\text{C}$	
		Pulsed, $T_{ch} < 150\text{ }^\circ\text{C}^{*2}$	
Total Power Dissipation	PD	$T_a = 25\text{ }^\circ\text{C}, \text{DC}^{*1}$	W
		$T_c = 25\text{ }^\circ\text{C}$	
Thermal Resistance	Channel to Ambient	$R_{th(ch-a)}$	$^\circ\text{C} / \text{W}$
	Channel to Case	$R_{th(ch-c)}$	
Channel Temperature	T_{ch}	150	$^\circ\text{C}$
Operating ambient temperature	T_{opr}	-40 to +85	
Storage Temperature Range	T_{stg}	-55 to +150	
Avalanche Current (Single pulse) ^{*3}	IAR	12	A
Avalanche Energy (Single pulse) ^{*3}	EAR	18	mJ

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

*2 Pulse test: Ensure that the channel temperature does not exceed $150\text{ }^\circ\text{C}$ *3 $V_{DD} = 24\text{ V}$, $V_{GS} = 10\text{ to }0\text{ V}$, $L = 0.1\text{ mH}$, $T_{ch} = 25\text{ }^\circ\text{C}$ (initial)

Internal Connection



Pin Name

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

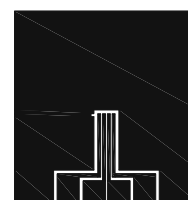


Figure 1 FR4 Glass-Epoxy Board
25.4 mm × 25.4 mm × 0.8 mm