

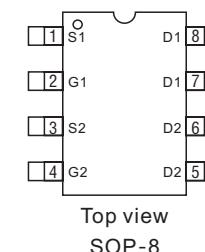
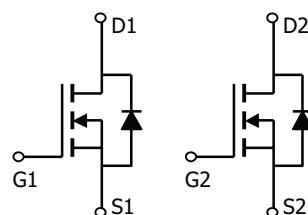
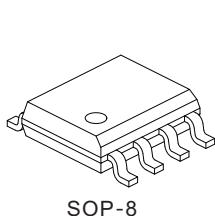
## Dual N-Channel High Density Trench MOSFET (20V, 6.0A)

| PRODUCT SUMMARY  |                |  |
|------------------|----------------|--|
| V <sub>DSS</sub> | I <sub>D</sub> | R <sub>D(on)</sub> (m-ohm) Max                     |
| 20V              | 6.0A           | 28 @ V <sub>GS</sub> = 4.5V, I <sub>D</sub> = 6.0A |
|                  |                | 40 @ V <sub>GS</sub> = 2.5V, I <sub>D</sub> = 5.2A |

### Features

- Advanced Trench Process Technology
- High Density Cell Design for Ultra Low On-Resistance
- Lead free product is acquired
- Surface mount Package

### Pin information:



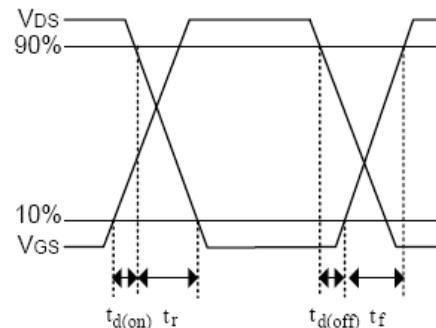
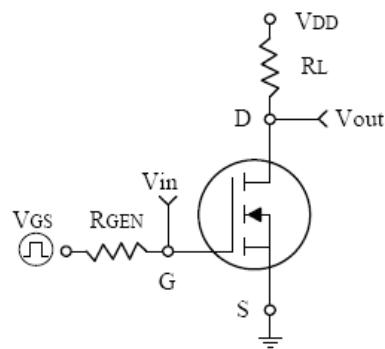
| Pin Number | Pin Name | Function |
|------------|----------|----------|
| SOP-8      | S1       | Source2  |
| 1          | G1       | Gate2    |
| 2          | S2       | Source1  |
| 3          | G2       | Gate1    |
| 4          | D2       | Drain1   |
| 5          | D2       | Drain1   |
| 6          | D1       | Drain2   |
| 7          | D1       | Drain2   |
| 8          | D1       | Drain2   |

### Absolute Maximum Ratings (T<sub>A</sub>=25°C, unless otherwise noted)

| Symbol                            | Parameter   | Ratings     | Units |
|-----------------------------------|---|-------------|-------|
| V <sub>DS</sub>                   | Drain-Source Voltage  | 20          | V     |
| V <sub>GS</sub>                   | Gate-Source Voltage   | ±12         | V     |
| I <sub>D</sub>                    | Drain Current (Continuous)  | 6.0         | A     |
| I <sub>DM</sub>                   | Drain Current (Pulsed) <sup>a</sup>                               | 20          | A     |
| P <sub>D</sub>                    | Total Power Dissipation @T <sub>A</sub> =25°C                     | 2.0         | W     |
| I <sub>S</sub>                    | Maximum Diode Forward Current                                     | 1.7         | A     |
| T <sub>j</sub> , T <sub>stg</sub> | Operating Junction and Storage Temperature Range                  | -55 to +150 | °C    |
| R <sub>θJA</sub>                  | Thermal Resistance Junction to Ambient (PCB mounted) <sup>b</sup> | 62          | °C/W  |

a: Repetitive Rating: Pulse width limited by the maximum junction temperature.

b: 1-in<sup>2</sup> 2oz Cu PCB board



Switching Test Circuit and Switching Waveforms