

## SIPMOS® Power-Transistor

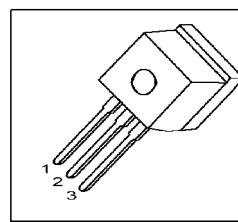
### Feature

- N-Channel
- Enhancement mode
- Logic Level
- 175°C operating temperature
- Avalanche rated
- dv/dt rated
- Pb-free lead plating; RoHS compliant

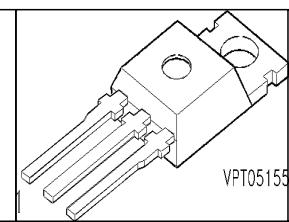
### Product Summary

|              |     |                  |
|--------------|-----|------------------|
| $V_{DS}$     | 100 | V                |
| $R_{DS(on)}$ | 14  | $\text{m}\Omega$ |
| $I_D$        | 80  | A                |

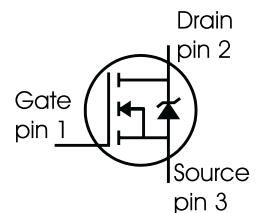
PG-T0262-3-1



PG-T0220-3-1



| Type      | Package      | Ordering Code | Marking |
|-----------|--------------|---------------|---------|
| SPP80N10L | PG-T0220-3-1 | Q67042-S4173  | 80N10L  |
| SPI80N10L | PG-T0262-3-1 | Q67042-S4172  | 80N10L  |



**Maximum Ratings**, at  $T_j = 25^\circ\text{C}$ , unless otherwise specified

| Parameter  | Symbol            | Value       | Unit              |
|--|-------------------|-------------|-------------------|
| Continuous drain current<br>$T_C=25^\circ\text{C}$   | $I_D$             | 80          | A                 |
| $T_C=100^\circ\text{C}$  |                   | 58          |                   |
| Pulsed drain current<br>$T_C=25^\circ\text{C}$   | $I_D$ puls        | 320         |                   |
| Avalanche energy, single pulse<br>$I_D=80\text{ A}$ , $V_{DD}=25\text{V}$ , $R_{GS}=25\Omega$  | $E_{AS}$          | 700         | mJ                |
| Avalanche energy, periodic limited by $T_{j\max}$  | $E_{AR}$          | 25          |                   |
| Reverse diode dv/dt<br>$I_S=80\text{A}$ , $V_{DS}=0\text{V}$ , $dI/dt=200\text{A}/\mu\text{s}$ | $dv/dt$           | 6           | kV/ $\mu\text{s}$ |
| Gate source voltage  | $V_{GS}$          | $\pm 20$    | V                 |
| Power dissipation<br>$T_C=25^\circ\text{C}$  | $P_{tot}$         | 250         | W                 |
| Operating and storage temperature  | $T_j$ , $T_{stg}$ | -55... +175 | °C                |
| IEC climatic category; DIN IEC 68-1  |                   | 55/175/56   |                   |













