## 650V N-channel Super Junction MOSFET

### MAIN CHARACTERISTICS

| | |
|---|---|
| $I_D$ | 15A |
| $V_{DSS}$ | 650V |
| $R_{DSON}$-typ(@$V_{GS}$=10V) | 280mΩ(Typ:238mΩ) |

## FEATURES

- Low gate charge
- Low RDS(on) per chip area(Low FOM)
- Very low switching and conduction loss
- Extremely high commutation ruggedness

## Application

- Solar inverters
- LCD/LED/PDP TV
- Telecom/Server Power supplies
- AC-DC Power Supply

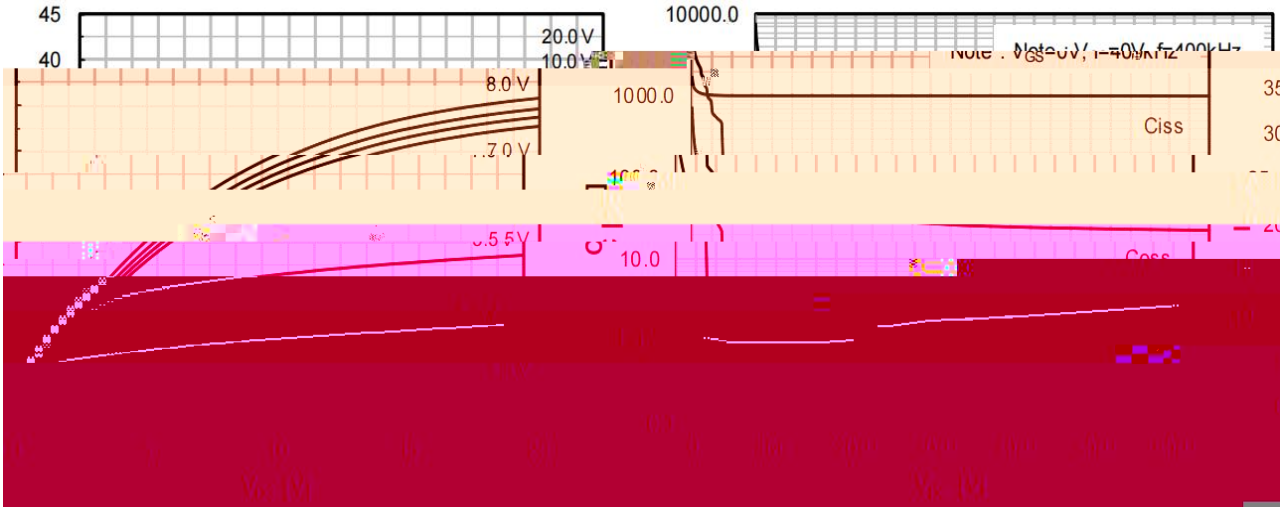
### MECHANICAL DATA

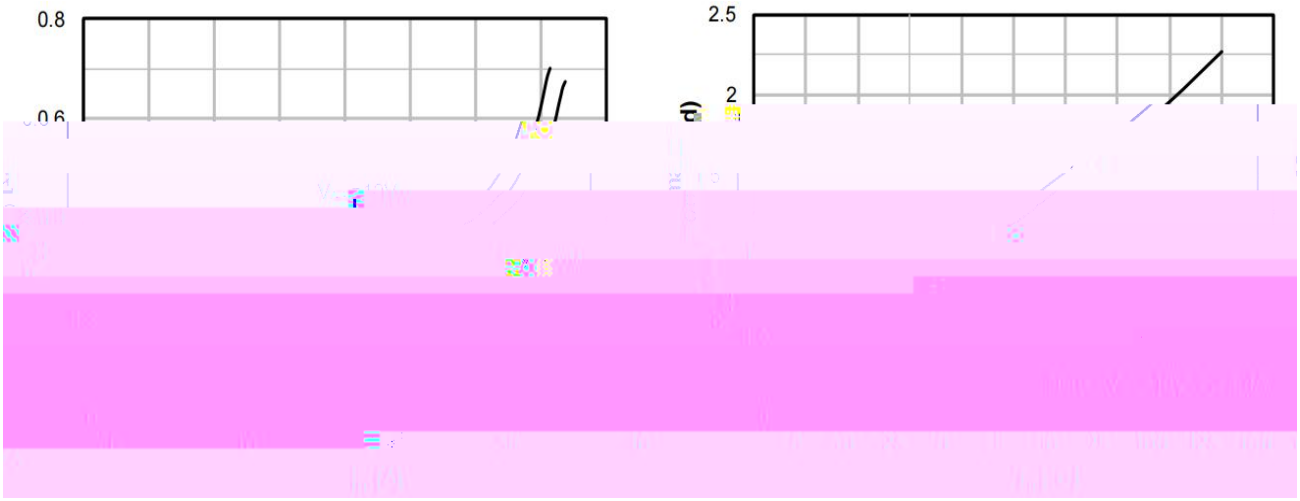
- Case: Molded plastic
- Mounting Position: Any
- Molded Plastic: UL Flammability Classification Rating 94V-0
- Lea

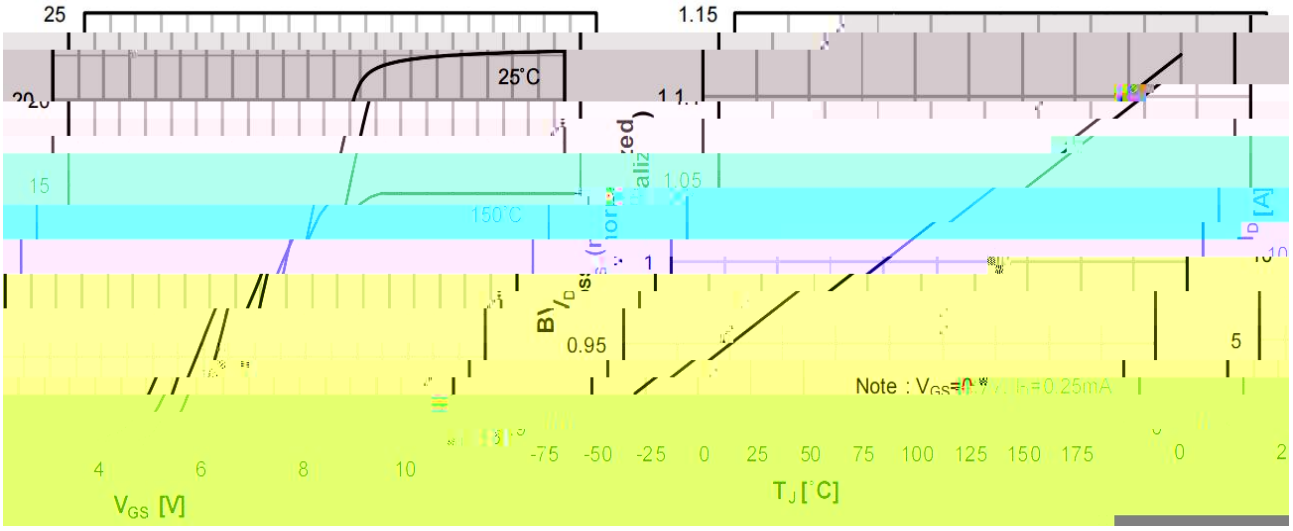
## Maximum Ratings at Tc=25°C unless otherwise specified

| Characteristics | Test Condition | Symbols | Min | Typ | Max | Units |
|---|---|---|---|---|---|---|
| Drain-Source Breakdown Voltage | $V_{GS}$=0V, $I_D$=250uA | $BV_{DSS}$ | 650 | - | - | V |
| Drain-Source Leakage Current | $V_{DS}$=650V , $V_{GS}$=0V | $I_{DSS}$ | - | - | 1 | μA |
| Gate-Source Leakage | $V_{GS}$=±30V, $V_{DS}$=0V | $I_{GSS}$ | - | - | ±100 | nA |
| Gate- Source Threshold Voltage | $V_{DS}$= $V_{GS}$, $I_D$=250μA | $V_{GS(th)}$ | 2.5 | - | 4.5 | V |
| Drain-Source On State Resistance | $V_{GS}$=10V, $I_D$=4.4A | $R_{DS(ON)}$ | - | 238 | 280 | mΩ |
| Input Capacitance | $V_{DS}$=50V<br>$V_{GS}$=0V<br>f=400KHz | $C_{iss}$ | - | 1720 | - | |
| Output Capacitance | | $C_{oss}$ | - | 79 | - | pF |
| Reverse Transfer | | | | | | |

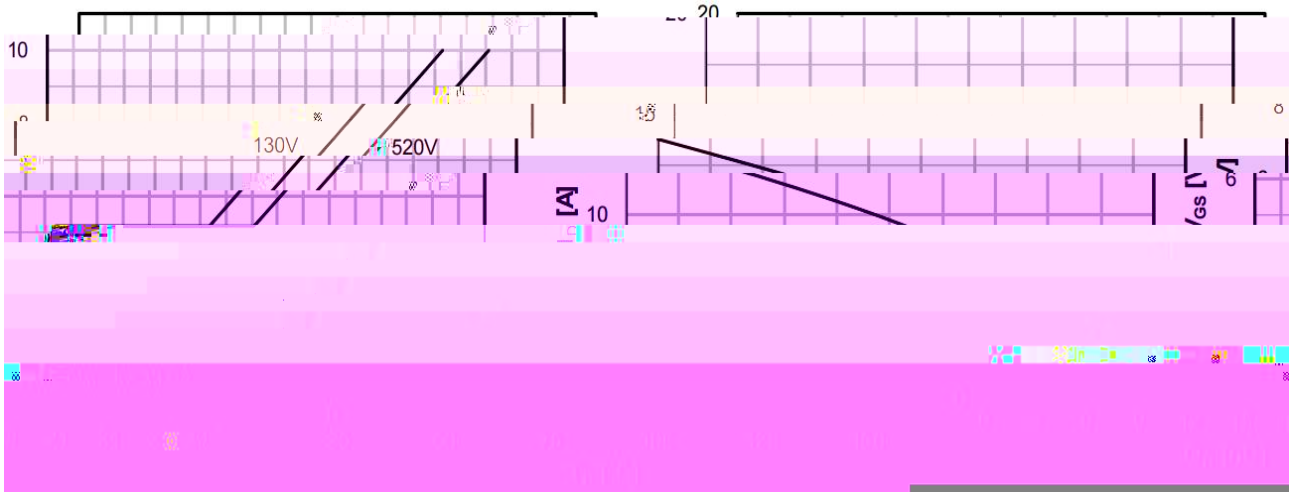
## Ratings and Characteristic Curves

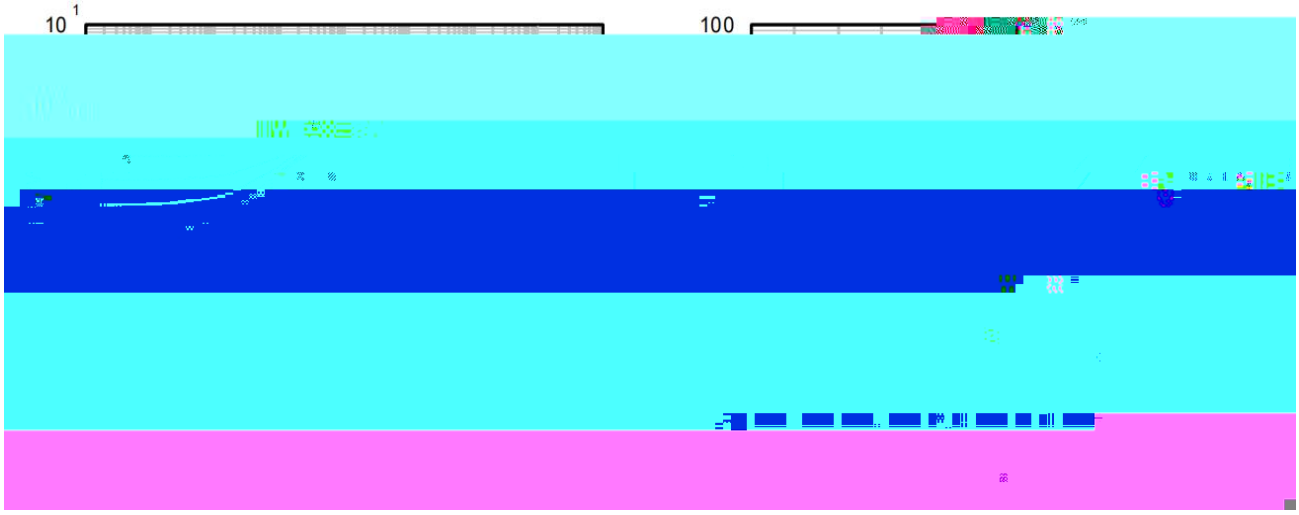


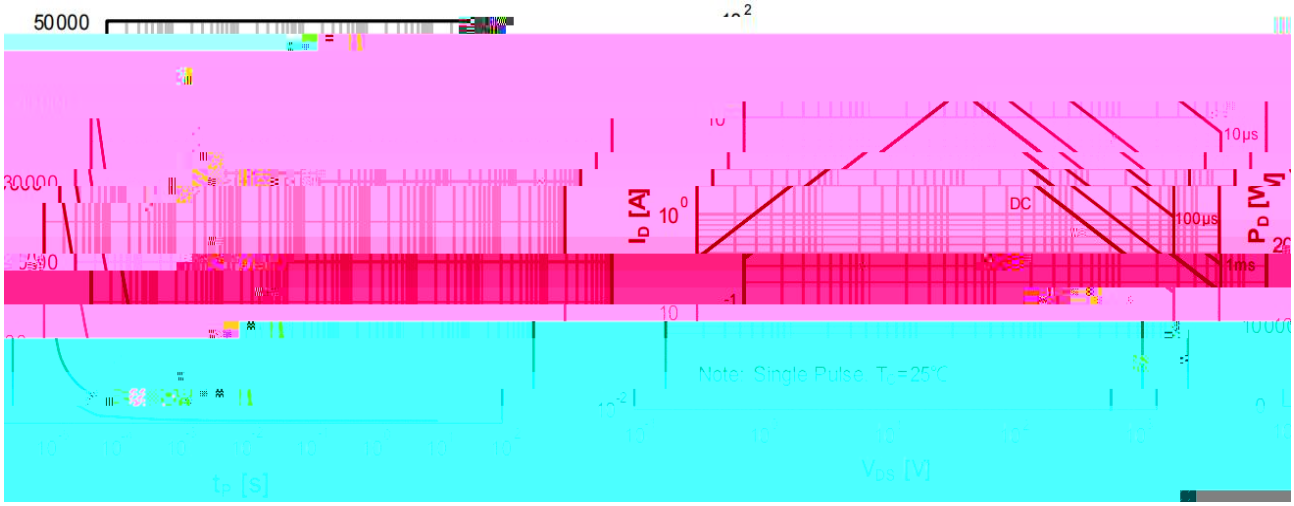



## Ratings and Characteristic Curves



## Marking Diagram

## Ordering information

| Model name | Package | Unit Weight | Base Quantity | Packing Quantity |
|---|---|---|---|---|
| YFW65R280AD | TO-2 | | | |

| | | | |
|---|---|---|---|
| 10.00 | 11.00 | 0.393 | 0.433 |

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