



查询CS458U12"供应商

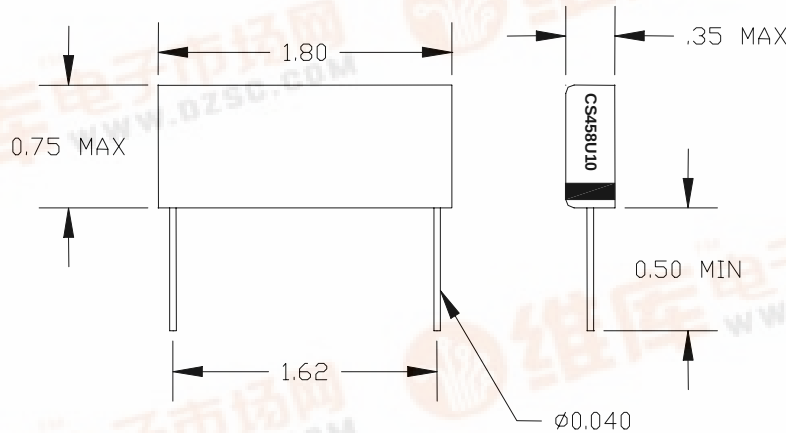
**HIGH VOLTAGE**  
POWER SYSTEMS, INC.

# CS458 Series

Radial High Current, High Voltage Diodes

## FEATURES

- Ratings to 15 kV
- Glass Passivated
- Controlled Avalanche Junctions
- High Surge Capability
- Designed for High Temperature Usage
- Small Footprint for Efficient PCB Layout
- Large Surface Area for Better Cooling During High Current Operation



## Maximum Ratings & Characteristics

### ELECTRICAL RATINGS, T = 25°C

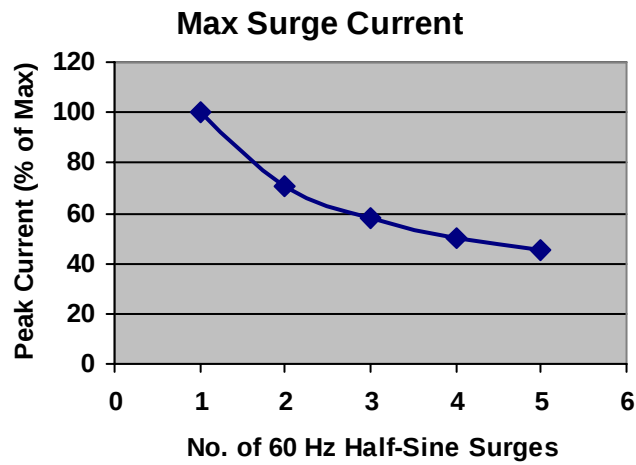
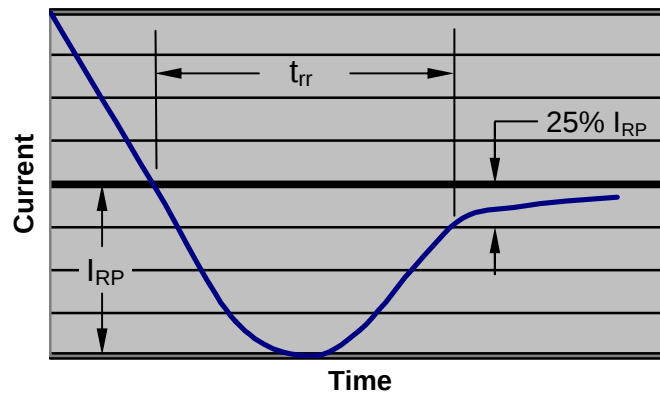
|                                                          |                                   | STANDARD RECOVERY |      |     |     | ULTRAFAST RECOVERY |     |     |     | UNITS |
|----------------------------------------------------------|-----------------------------------|-------------------|------|-----|-----|--------------------|-----|-----|-----|-------|
|                                                          |                                   | CS 458            |      |     |     | CS 458             |     |     |     |       |
| ELECTRICAL RATINGS, T= 25C                               |                                   | S8                | S10  | S12 | S15 | U8                 | U10 | U12 | U15 |       |
| Repetitive Peak Reverse Voltage                          | V <sub>RRM</sub>                  | 8                 | 10   | 12  | 15  | 8                  | 10  | 12  | 15  | kV    |
| Avg. Forward Current in Air, T <sub>a</sub> = 25°C       | I <sub>o</sub>                    | 650               | 550  | 475 | 425 | 425                | 375 | 325 | 275 | mA    |
| Avg. Forward Current in Oil, T <sub>oil</sub> = 60°C     | I <sub>o</sub>                    | 1200              | 1000 | 870 | 780 | 750                | 660 | 570 | 480 | mA    |
| Peak Surge Current, Single ½ Cycle @ 60 Hz               | I <sub>FSM</sub>                  | 50                |      |     |     | 30                 |     |     |     | A     |
| Peak Reverse Avalanche Energy, Non-Repetitive, t = 20 μS | E <sub>RSM</sub>                  | 160               | 200  | 240 | 300 | 80                 | 100 | 120 | 150 | mJ    |
| Storage and Operating Temperatures                       | T <sub>stg</sub> , T <sub>j</sub> | - 55 to 150       |      |     |     | - 55 to 150        |     |     |     | °C    |

### ELECTRICAL CHARACTERISTICS, T = 25°C

|                                                                                           |          |     |    |    |    |       |    |    |      |               |
|-------------------------------------------------------------------------------------------|----------|-----|----|----|----|-------|----|----|------|---------------|
| Maximum Instantaneous Forward Voltage, $I_F = 1.0 \text{ A}$                              | $V_F$    | 8   | 10 | 12 | 15 | 20    | 25 | 30 | 37.5 | V             |
| Maximum Reverse Current at Rated $V_{RRM}$                                                | $I_R$    | 1.0 |    |    |    | 1.0   |    |    |      | $\mu\text{A}$ |
| Maximum Reverse Recovery Time, $I_F = 0.5 \text{ A}$ , $I_R = 1 \text{ A}$ , 75% Recovery | $t_{rr}$ | 2.5 |    |    |    | 0.075 |    |    |      | $\mu\text{s}$ |



### $t_{rr}$ Definition



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2542 Highlander Way  
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