

CentralTM Semiconductor Corp.

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Manufacturers of World Class Discrete Semiconductors

CRSH25-2
THRU
CRSH25-6

SCHOTTKY BARRIER RECTIFIER
25 AMPS, 20 TO 60 VOLTS

JEDEC DO-4 CASE

DESCRIPTION

The CENTRAL SEMICONDUCTOR CRSH25-2 series types are schottky barrier rectifiers mounted in a hermetically sealed metal stud package, featuring a low forward voltage drop and instantaneous reverse recovery time.

MAXIMUM RATINGS ($T_C = 25^\circ\text{C}$)

| | <u>SYMBOL</u> | <u>CRSH</u> <u>25-2</u> | <u>CRSH</u> <u>25-3</u> | <u>CRSH</u> <u>25-4</u> | <u>CRSH</u> <u>25-5</u> | <u>CRSH</u> <u>25-6</u> | <u>UNITS</u> |
|---|----------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|--------------------|
| Peak Repetitive Reverse Voltage | V_{RRM} | 20 | 30 | 40 | 50 | 60 | V |
| DC Blocking Voltage | V_R | 20 | 30 | 40 | 50 | 60 | V |
| RMS Reverse Voltage | $V_{R(RMS)}$ | 14 | 21 | 28 | 35 | 42 | V |
| Average Forward Current ($T_C = 150^\circ\text{C}$) | I_O | | | | 25 | | A |
| Peak Forward Surge Current (8.3ms pulse) | I_{FSM} | | | | 800 | | A |
| Operating and Storage | | | | | | | |
| Junction Temperature | T_J, T_{stg} | | | -55 to +175 | | | $^\circ\text{C}$ |
| Thermal Resistance | θ_{JC} | | | | 1.8 | | $^\circ\text{C/W}$ |

ELECTRICAL CHARACTERISTICS ($T_C = 25^\circ\text{C}$ unless otherwise noted)

| <u>SYMBOL</u> | <u>TEST CONDITIONS</u> | <u>MIN</u> | <u>MAX</u> | <u>UNITS</u> |
|---------------|--|------------|------------|--------------|
| I_R | $V_R = \text{Rated } V_{RRM}$ | | 2.0 | mA |
| I_R | $V_R = \text{Rated } V_{RRM}, T_C = 150^\circ\text{C}$ | | 150 | mA |
| V_F | $I_F = 25\text{A}$ | | 0.58 | V |
| V_F | $I_F = 25\text{A}, T_C = 175^\circ\text{C}$ | | 0.53 | V |