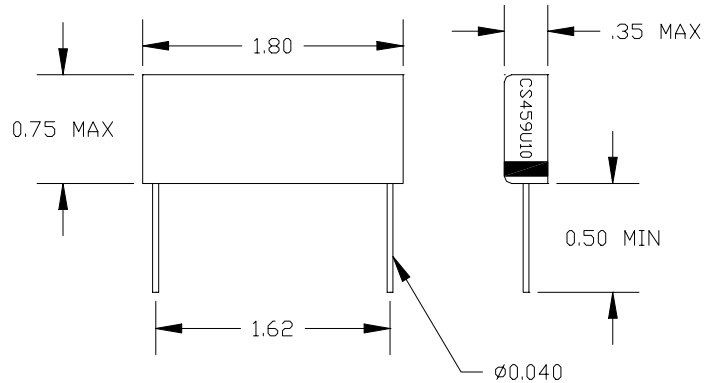


CS459-Series

High Voltage – High Current Rectifiers

RATINGS TO 12 KILOVOLTS
 GLASS PASSIVATED
 CONTROLLED AVALANCHE JUNCTIONS
 HIGH SURGE CAPABILITY
 DESIGNED FOR HIGH TEMPERATURE
 OPERATION
 ULTRAFAST RECOVERY TIMES OF 75 nS
 EFFICIENT USE OF PC BOARD AREA
 LARGE SURFACE AREA FOR COOLER
 OPERATION



| ELECTRICAL RATINGS, T = 25C | | STANDARD RECOVERY | | | ULTRAFAST RECOVERY | | | UNITS |
|---|-----------------------------------|-------------------|-----|-----|--------------------|-----|-----|-------|
| | | CS 459 | | | CS 459 | | | |
| | | S8 | S10 | S12 | U8 | U10 | U12 | |
| REPETITIVE PEAK REVERSE VOLTAGE, AND CONTINUOUS REVERSE VOLTAGE | V _{rrm} , V _r | 8 | 10 | 12 | 8 | 10 | 12 | KVOLT |
| AVERAGE FORWARD CURRENT IN AIR, T _{amb} = 25C | I _o | 1100 | 970 | 850 | 850 | 750 | 650 | mAMP |
| AVERAGE FORWARD CURRENT, T _{oil} = 55C | I _o | 2.0 | | | 1.5 | | | AMP |
| PEAK SURGE CURRENT, NON-REPETITIVE, 1/2 cycle, 60 Hz | I _{fsm} | 80 | | | 45 | | | AMP |
| STORAGE AND OPERATING TEMPERATURES | T _{stg} , T _j | - 55 to 150 | | | - 55 to 150 | | | DEG C |

| ELECTRICAL CHARACTERISTICS, T = 25C | | | | | | | | |
|---|-----------------|------|------|------|-------|------|------|-------|
| MAXIMUM INSTANTANEOUS FORWARD VOLTAGE, I _f = 2.0 amp | V _{fm} | 10.0 | 12.5 | 15.0 | 10.7 | 13.4 | 16.1 | VOLTS |
| MAXIMUM REVERSE CURRENT AT RATED V _r | I _{rm} | 10.0 | | | 10.0 | | | uAMP |
| MAXIMUM REVERSE RECOVERY TIME, I _f = 0.5 amp to I _r = 1 amp | T _{rr} | 2.5 | | | 0.075 | | | uSEC |

Rev 1, 9/94



HIGH VOLTAGE
POWER SYSTEMS, INC.

PO Box 700968 • Dallas TX 75370
Ph (972) 248-7691 • Fax (972) 381-9998