# SEMI CODE

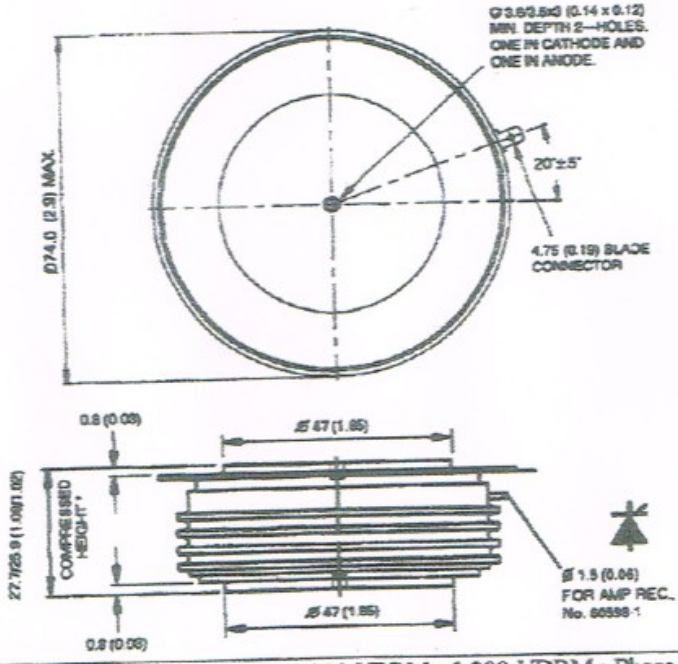
# SC 1500Hxx

## PHASE CONTROL - SCR

| RATING | CONDITIONS | SYMBOL | |
|---|---|---|---|
| **ITAV** forward current. | Tc=66°C, conduction angle 180 ° | ITAV | 1.500 A |
| **R.M.S.** on-state current. | | ITRMS | 2.400 A |
| **ITSM** Peak one cycle surge Current. | | ITSM | 28.500 A |
| **I²t** for fusing. | For fusing at 8.3msec | I²t | 3.370.000 A²s |
| **di/dt** max. | Non-repetitive | di/dt | 100 A/µs |
| **dv/dt** min. | Rate-of-rise off-state voltage | dv/dt | 400 V/µs |
| **Tq-typical** turn-off time | It=250 A,dir/dt=25 A /µsec,reapplied dv/dt=20v/µsec,linear to 0,8Vdrm. | Tq | 150µs |
| **Igt** max. gate trigger current. | @ 25°C | Igt | 150 mA |
| **Vgt** máx. gate trigger voltage. | @ 25°C | Vgt | 3,5 V |
| **Vtm** peak on-state voltage | @ Itm=4.000 A | Vtm | 1,6 V |
| **Rthjc** máx. Thermal resistance junction-to-case. | | Rthjc | 0,025 °C/W |
| **Rthcs** máx. Thermal resistanceCase-to-sink | | Rthcs | 0,005 °C/W |
| **Tj** min-máx. jnction operanting temperature. | | Tjmin - máx. | -40°C-125 °C |
| **F** máx. Mounting torque required | | Fmáx. | 5.000 Lb. |

| VOLTAGE CODE | H08 | H10 | H12 | H14 | H16 | H18 |
|---|---|---|---|---|---|---|
| Repetitive peak voltages VRRM,VDRM Non-repetitive peak off-state voltage (V) | 800 | 1000 | 1200 | 1400 | 1600 | 1800 |
| Non-repetitive peak reverse voltage (V) | 900 | 1100 | 1300 | 1500 | 1700 | 1900 |

**Dimensions:**




On-State Voltage (Volts)

Forward Volt-Drop Calculations:

$V_T = A + B\ln I_T + C I_T + D\sqrt{I_T}$

Notes:
Dimensions in mm (inches)
Mounting Force: 1900 – 2500 Kgf
Weight: 510 grams

Typical code : SC 1500H12 = 1.500 A ;1.200 VRRM ; 1.200 VDRM ; Phase control-SCR.