SOLID STATE INC.
46 FARRAND STREET
BLOOMFIELD, NEW JERSEY 07003 www.solidstateinc.com

SILICON RECTIFIERS

85 Ampere Silicon Power Diodes

DO-5

FEATURES

- Diffused Series
- Available in Normal & Reverse Polarity
- Industrial grade
- Available In Avalanche Characteristic

ELECTRICAL SPECIFICATIONS

		85HF/HFR
$I_{F(AV)}$	Maximum Average Forward Current Tc = 125°C	85A
V_{FM}	Maximum peak forward voltage drop @ Rated 1F(AV)	1.3 V
I_{FSM}	Maximum peak one cycle (non-rep) surge current 10 msec	1500 A
I_{FRM}	Maximum peak cylce repetive surge current	400 A
I^2t	Maximum I^2t rating (non-rep.) for 5 to 10 msec.	10000 A^2 Sec

THERMAL MECHANICAL SPECIFICATIONS

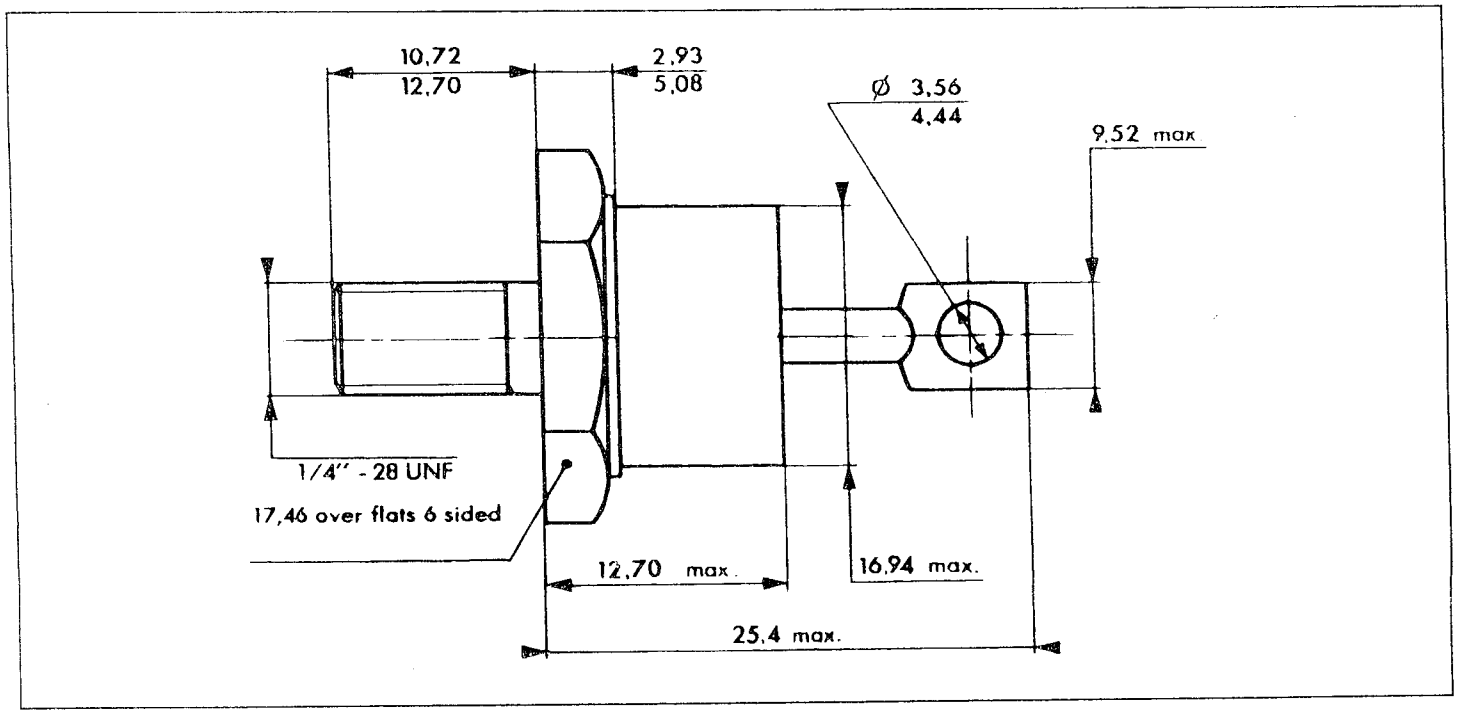
O_{J-C}	Maximum thermal resistance junction to case	0.55° C/W
T_J	Operating Junction Temp.	-65°C to 150°C
T_{stg}	Storage temperature.	-65°C to 200°C
	Mounting torque (Non-lubricated threads)	0.4 M-Kg min. 0.6 M-kg max.
W	Approx. weight	13..5 & 30 gms.

ELECTRICAL RATINGS

TYPE	NUMBER 85 HF/HFR	10	20	40	60	80	100	120	140	160
VRRM	Max. repetitive peak voltage (V)	100	200	400	600	800	1000	1200	1400	1600
VR(RMS)	Max.R.M.S Reverse Voltage (V)	70	140	280	420	560	700	840	980	1120
VR	Max. D.C. Blocking Voltage(V)	100	200	400	600	800	1000	1200	1400	1640
	Recommended R.M.S. working voltage (V)	40	80	160	240	320	400	480	560	640
IR(AV)	Max. Average reverse leakage current @ VRRM Tc 25°C uA)	200	200	200	200	200	200	200	200	200

PACKAGE MECHANICAL DATA

DO 5 Metal



Marking : Cathode connected to case : type number
Anode connected to case : type number + suffix R