



**SOLID STATE INC.**

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www.solidstateinc.com

## Silicon Rectifiers

### 12 Ampere & 16 Ampere Silicon Power Diodes

#### FEATURES

- ❖ All Diffused Series
- ❖ Available in Normal & Reverse Polarity
- ❖ Industrial Grade
- ❖ Available In Avalanche Characteristic

**DO-4**

#### ELECTRICAL SPECIFICATIONS

		12F/FR	16F/FR
IF(A)	Maximum Average Forward Current Tc = 150°C	12A	16 A
VFM	Maximum peak forward voltage drop @ Rated IF(AV)	1.2 V	1.2 V
IFSM	Maximum peak one cycle (non-rep) surge current 10 msec	250 A	300 A
IFRM	Maximum peak one cycle (non-rep) surge current 10 msec	60 A	80 A
I <sup>2</sup> t	Maximum I <sup>2</sup> t rating (non-rep.) for 5 to 10 msec.	250 A <sup>2</sup> Sec	450A <sup>2</sup> Sec

#### THERMAL MECHANICAL SPECIFICATIONS

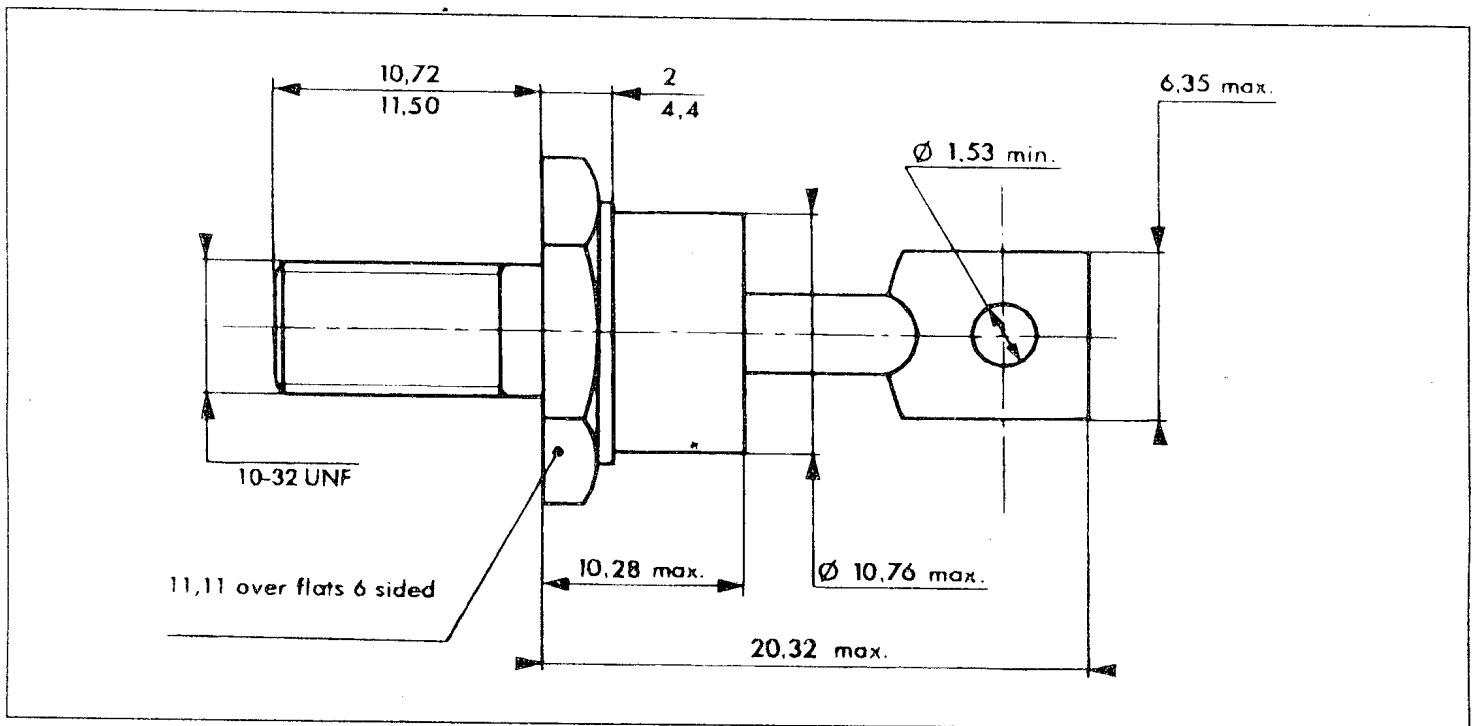
	Maximum thermal resistance junction to case	2°C/w 1°C/W
TJ	Operating Junction Temp.	-65°C to 150°C
Tstg	Storage temperature.	-65°C to 150°C
	Mounting torque (Non-lubricated threads)	0.14 M-Kg min., 0.17 M-kg max.
W	Approx. weight	7 gms.

#### ELECTRICAL RATINGS

TYPE	NUMBER 12F/FR 16F/FR	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	60	800	1000	1200	1400	1600
	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	10	10	10	10	10	10	10	10	10

## PACKAGE MECHANICAL DATA

DO 4 Metal



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