

## SILICON RECTIFIERS

### 150 Ampere Silicon Power Diodes

#### FEATURES

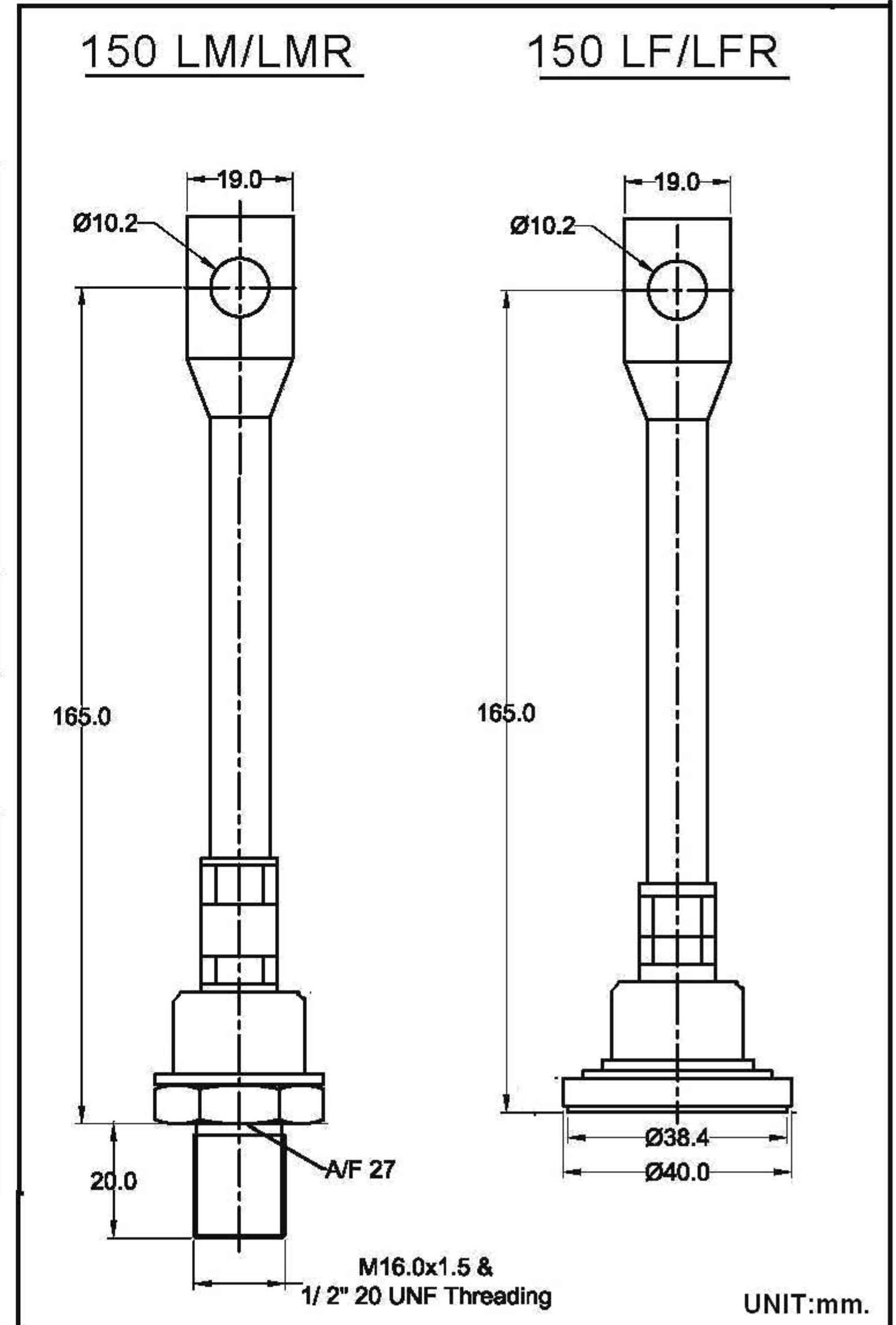
- ❖ Diffused series.
- ❖ Available in normal & reverse polarity.
- ❖ Device conforms to IS 3700 (III) & IS 4400 (III).
- ❖ Device outline conforms to IS 5000 (Do. 6).

#### ELECTRICAL SPECIFICATIONS

$I_{F(AV)}$	Maximum average forward current $T_c = 130^\circ\text{C}$	150 A
$V_{FM}$	Maximum peak forward voltage drop @ Rated $I_{F(peak)}$	1.4 V
$I_{FSM}$	Maximum peak one cycle (non-rep.) surge current 10 msec.	3600 A
$I_{FRM}$	Maximum repetitive peak forward current	750 A
$I^2t$	Max. $I^2t$ rating (non-rep.) 10 msec.	64800 A <sup>2</sup> Sec
$V_{F(TO)}$	Max, value of threshold voltage	0.76 V
$r_f$	Max, value of forward slop resistance	1.41 m $\Omega$

#### THERMAL MECHANICAL SPECIFICATIONS

$\theta_{J-C}$	Maximum thermal resistance junction to case	0.25 <sup>o</sup> C/W
$\theta_{C-H}$	Contact thermal resistance	150LM/LMR 0.1 <sup>o</sup> C/W 150LF/LFR 0.07 <sup>o</sup> C/W
$T_J$	Operating junction temp.	-40 <sup>o</sup> C to 175 <sup>o</sup> C
$T_{stg}$	Storage temperature	-40 <sup>o</sup> C to 175 <sup>o</sup> C
	Mounting torque (Non-lubricated threads)	2.0 M-Kg min. 3.0 M-Kg max.
W	Approx. weight	150 gms.



#### ELECTRICAL RATINGS

TYPE NUMBER	150 LM/LMR 150 LF/LFR	40	60	80	100	120	140	160
$V_{RRM}$	Max. repetitive peak reverse voltage (V)	400	600	800	1000	1200	1400	1600
$V_{RSM}$	Max. non-repetitive peak reverse voltage (V)	500	700	900	1100	1300	1500	1700
$V_{R(RMS)}$	Max. R.M.S. reverse voltage (V)	280	420	560	700	840	980	1120
$V_R$	Max. D.C. Blocking voltage (V)	400	600	800	1000	1200	1400	1600
	Recommended R.M.S. working voltage (V)	160	240	320	400	480	560	640
$I_R$	Max. Peak reverse leakage current @ $V_{RRM}, T_c$ (mA)	15	15	15	15	15	15	15

# SILICON RECTIFIER

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## ORDER INFORMATION TABLE

<b>150 L</b>	<b>M/F</b>	<b>R</b>	<b>40</b>
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①                      ②                      ③                      ④

- ① - 150 L - Essential Part no.
- ② - None - Stud with 1/2" UNF.2A Threading  
3/8"-24UNF 2A Thread  
M - Stud with M16 x 1.5P Metric Threading  
F - Round flat base
- ③ - None - Normal polarity  
R - Reverse polarity
- ④ - Voltage Rating (See table)

# SILICON RECTIFIERS

## 150 L/LR SERIES

