



# Ruttonsha International Rectifier Ltd.

## FAST RECOVERY SILICON RECTIFIERS

### 100 Ampere Silicon Power Diodes

#### FEATURES

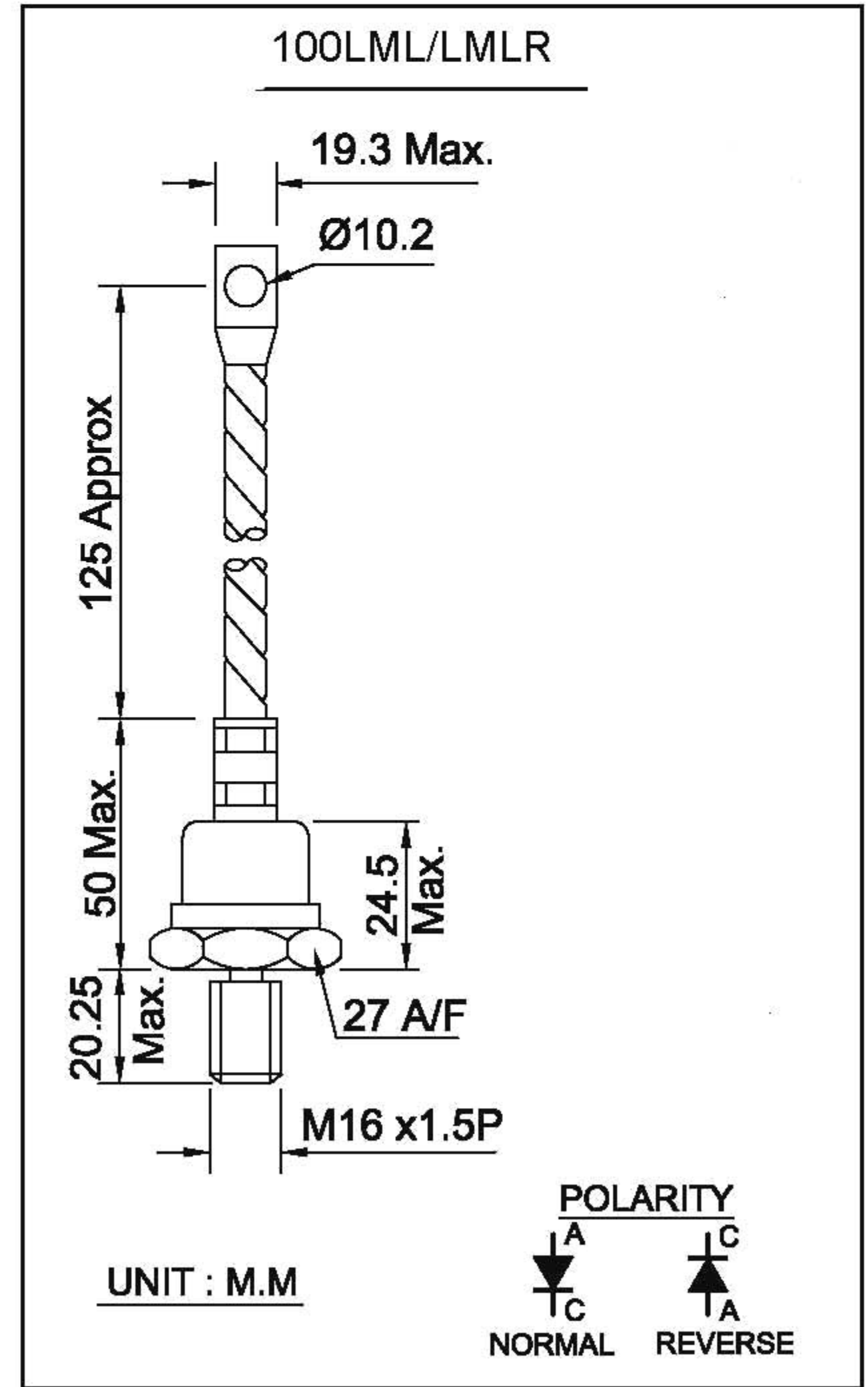
- ❖ Diffused series.
- ❖ Available in normal & reverse polarity.
- ❖ Device conforms to IS 3700 (III) & IS 4400 (III).
- ❖ Device outline conforms to IS 5000 (Do. 6).

#### ELECTRICAL SPECIFICATIONS

$I_{F(AV)}$	Maximum average forward current $T_c = 75^\circ\text{C}$	100 A
$V_{FM}$	Maximum peak forward voltage drop @ Rated $I_{F(peak)}$	1.60 V
$I_{FSM}$	Maximum peak one cycle (non-rep.) surge current 10 msec.	1800 A
$I^2t$	Max. $I^2t$ rating (non-rep.) 10 msec.	16200 A <sup>2</sup> Sec
$t_{rr}$	Max. Reverse Recovery Time IFM=350A, -di/dt=25A/us, Tj=25 deg. centi.	500 ns

#### THERMAL MECHANICAL SPECIFICATIONS

$\theta_{J-C}$	Maximum thermal resistance junction to case	0.35 °C/W
$\theta_{C-H}$	Contact thermal resistance	0.15 °C/W
$T_J$	Operating junction temp.	-40°C to 150°C
$T_{stg}$	Storage temperature	-40°C to 150°C
	Mounting torque (Non-lubricated threads)	2.0 M-Kg min. 3.0 M-Kg max.
W	Approx. weight	150 gms.



#### ELECTRICAL RATINGS

		100LML/LMLR					
TYPE NUMBER		10	20	40	60	80	100
$V_{RRM}$	Max. repetitive peak reverse voltage (V)	100	200	400	600	800	1000
$V_{RSM}$	Max. non-repetitive peak reverse voltage (V)	150	300	500	700	900	1100
$V_{R(RMS)}$	Max. R.M.S. reverse voltage (V)	70	140	280	420	560	700
$V_R$	Max. D.C. Blocking voltage (V)	100	200	400	600	800	1000
	Recommended R.M.S. working voltage (V)	40	80	160	240	320	400
$I_{RM}$	Max. Average reverse leakage current @ $V_{RRM}$ $T_c$ (mA)	15	15	15	15	15	15

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### ORDER INFORMATION TABLE

<b>100 L</b>	<b>ML</b>	<b>R</b>	<b>40</b>
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①                      ②                      ③                      ④

- ① - 100 L - Essential Part no.
- ② - None - Stud with 1/2" UNF.2A Threading  
M - Stud with M16 x 1.5P Metric Threading
- ③ - None - Normal polarity  
R - Reverse polarity
- ④ - Voltage Rating (See table)