



HIND RECTIFIERS LTD.  
 REGD. OFFICE & WORKS: LAKE ROAD, BHANDUP,  
 MUMBAI – 400 078  
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 Web site: http:// www.hirect.com

**RECTIFIER DIODE**

**SXXBN/BR 85M/U/M1**

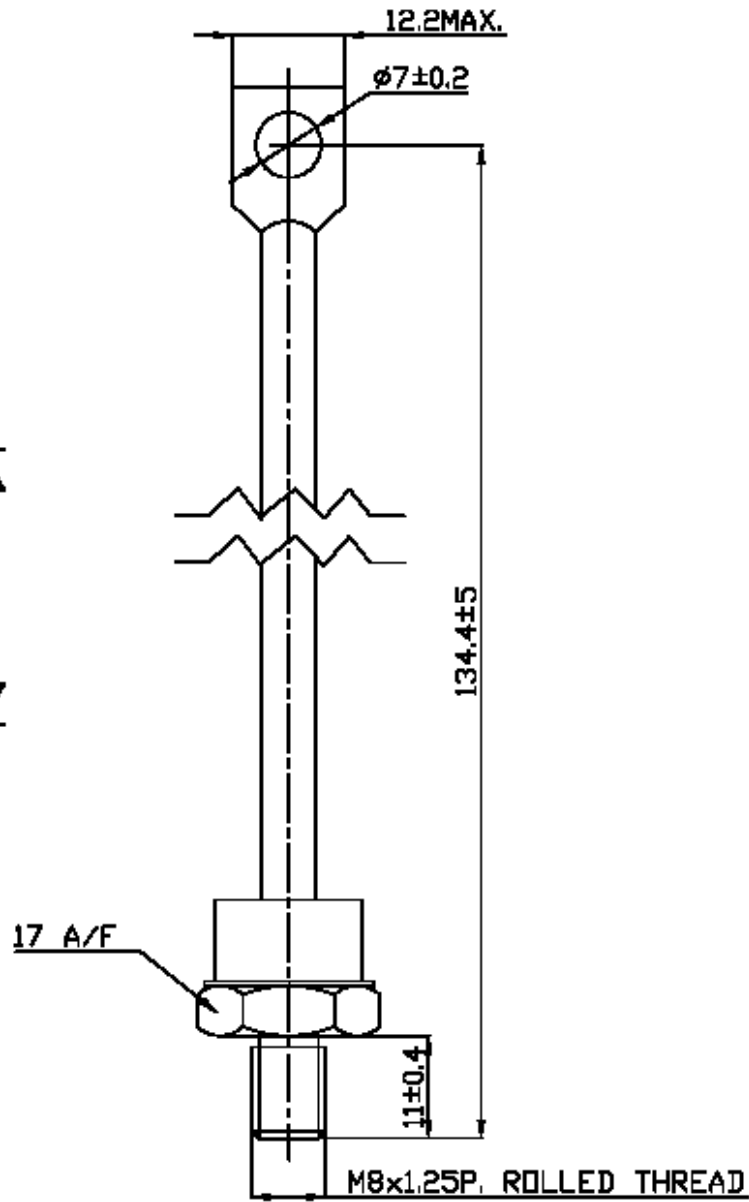
Repetitive voltage upto **1200 V**  
 Mean forward current **85 A**  
 Surge current **1700 A**

Symbol	Characteristic	Conditions	T <sub>j</sub> [°C]	Value	Unit
<b>BLOCKING</b>					
V <sub>RRM</sub>	Repetitive peak reverse voltage		180	200 - 1200	V
I <sub>RRM</sub>	Repetitive peak reverse current	V = V <sub>RRM</sub>	180	10	mA
<b>CONDUCTING</b>					
I <sub>F(AV)</sub>	Mean forward current	180° sin ,50 Hz, T <sub>CASE</sub> = 140 °C		85	A
I <sub>RMS</sub>	RMS forward current			133	A
I <sub>FSM</sub>	Surge forward current	Sine wave, 10 ms	180	1700	A
I <sup>2</sup> t	I <sup>2</sup> t	Sine wave, 10 ms		14450	A <sup>2</sup> s
V <sub>FM</sub>	Forward voltage	Forward current = 250A	180	1.20	V
V <sub>F(TO)</sub>	Threshold voltage		180	0.75	V
r <sub>F</sub>	Forward slope resistance		180	1.5	mΩ
<b>MOUNTING</b>					
R <sub>th(j-c)</sub>	Thermal impedance, 180° sine & DC	Junction to case,		0.35	°C/W
R <sub>th(j-c)</sub>	Thermal impedance, 120° rectangular	Junction to case,		0.40	°C/W
R <sub>th(c-h)</sub>	Thermal impedance	Case to heatsink		0.15	°C/W
T <sub>j</sub>	Max. junction temperature			180	°C
T <sub>stg</sub>	Storage temperature			-40 .... 180	°C
F	Mounting Torque			4.5 – 5.5	NM
	Weight			25	g
	Outline drawing reference	For SXXBN/BR85M..... Stud M8X1.5 For SXXBN/BR85U.....Stud ¼" 28 UNF For SXXBN/BR85M1.....Stud M6X1		TE-7096 TE-6351 TE-7097	

IF IN DOUBT, ASK

SF03-009

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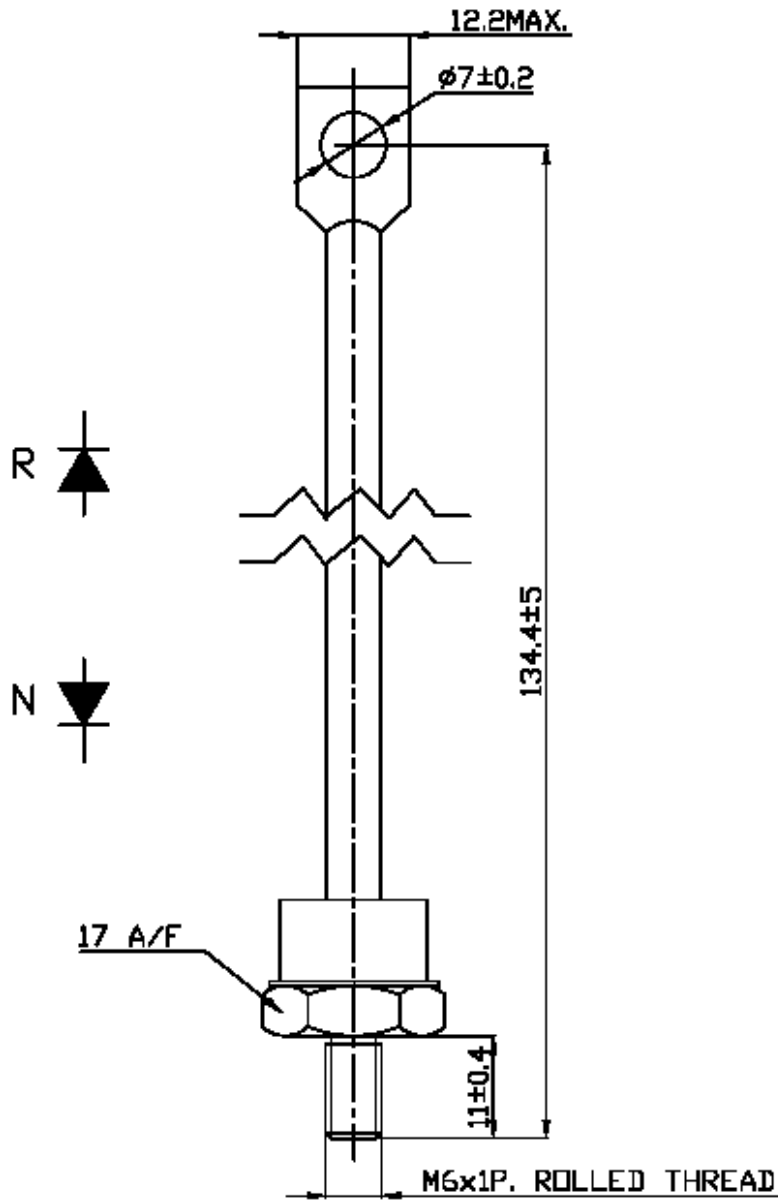
QTY.		DESCRIPTION		REF.	MAT.	P.T.	REMARKS
RL NO.	DATE	ZONE	BRIEF RECORD OF REVISION		INITIAL		
SCALE		DRG.	DATE	NAME	<b>HIND</b> RECTIFIERS LTD MUMBAI 400 078, SEMICONDUCTOR DIVISION		
DIMEN IN MM.		DR.	14/83	S.G.K.			
		DA	14/83				
		AP.	14/83				
TOLERANCE: 0.2		ORDER REF. : EXPORT ENQUIRY				DRG. NO.	TE-7096



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<b>DIODE</b>					DRG. NO.	TE-7097	
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