

## SILICON RECTIFIERS

### 200 Ampere Silicon Power Diodes

#### FEATURES

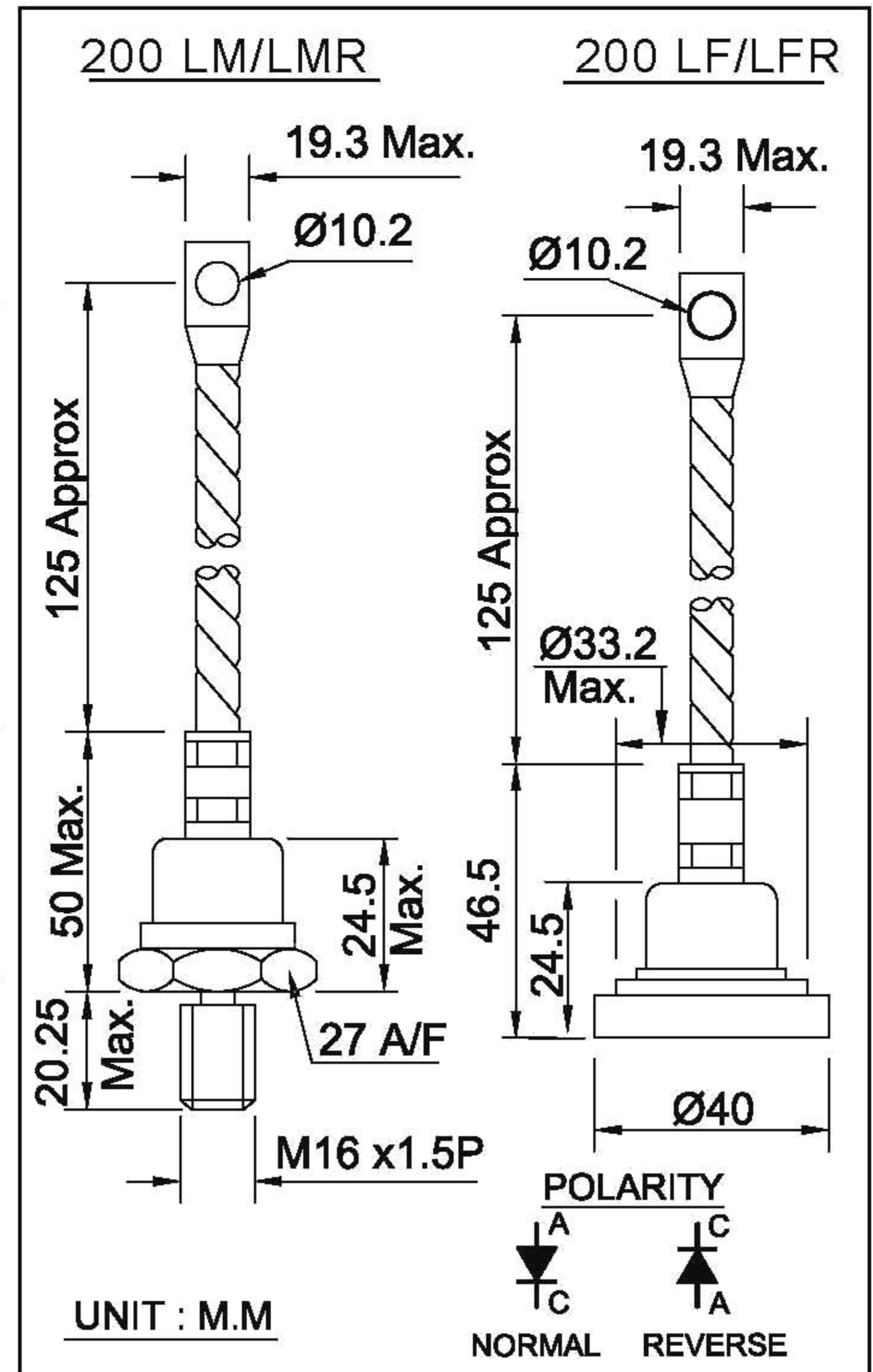
- ❖ Diffused series.
- ❖ Available in normal & reverse polarity.
- ❖ Device conforms to IS 3700 (III) & IS 4400 (III).
- ❖ Device outline conforms to IS 5000 (Do. 6).

#### ELECTRICAL SPECIFICATIONS

$I_{F(AV)}$	Maximum average forward current $T_c = 125^\circ\text{C}$	200 A
$V_{FM}$	Maximum peak forward voltage drop @ Rated $I_{F(peak)}$	1.55 V
$I_{FSM}$	Maximum peak one cycle (non-rep.) surge current 10 msec.	3650 A
$I_{F(RMS)}$	Maximum R.M.S forward current	314 A
$I^2t$	Max. $I^2t$ rating (non-rep.) 10 msec.	66600 A <sup>2</sup> Sec

#### 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 180 <sup>o</sup> C
$T_{stg}$	Storage temperature	-40 <sup>o</sup> C to 180 <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	200 LM/LMR 200 LF/LFR	20	40	60
$V_{RRM}$	Max. repetitive peak reverse voltage (V)	200	400	600
$V_{RSM}$	Max. non-repetitive peak reverse voltage (V)	300	500	700
$V_{R(RMS)}$	Max. R.M.S. reverse voltage (V)	140	280	420
$V_R$	Max. D.C. Blocking voltage (V)	200	400	600
	Recommended R.M.S. working voltage (V)	80	160	240
$I_{RM}$	Max. Peak reverse leakage current @ $V_{RRM}, T_c$ (mA)	15	15	15

# SILICON RECTIFIER

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## ORDER INFORMATION TABLE

<b>200 L</b>	<b>M/F</b>	<b>R</b>	<b>40</b>
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①                      ②                      ③                      ④

- ① - 200 L - Essential Part no.
- ② - None - Stud with 1/2" UNF.2A Threading  
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 RECTIFIER

## 200LM/LMR & 200LF/LFR SERIES

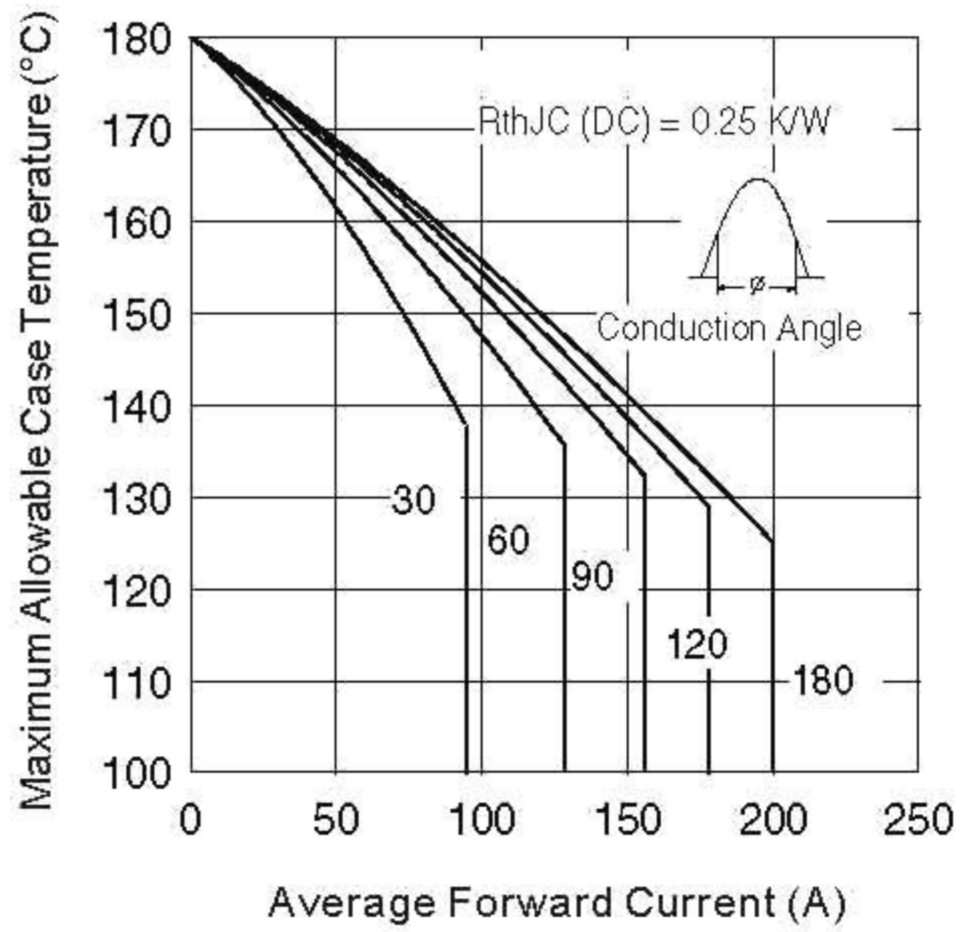


Fig. 1 - Current Ratings Characteristics

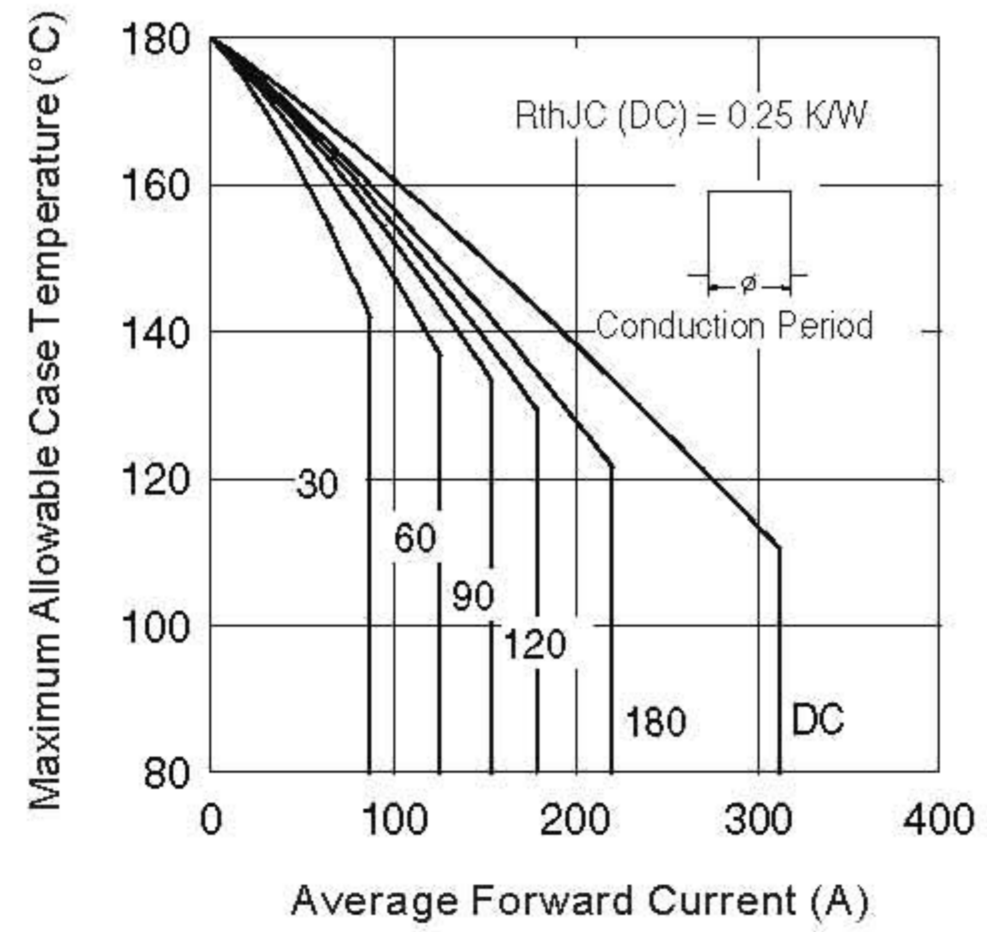


Fig. 2 - Current Ratings Characteristics

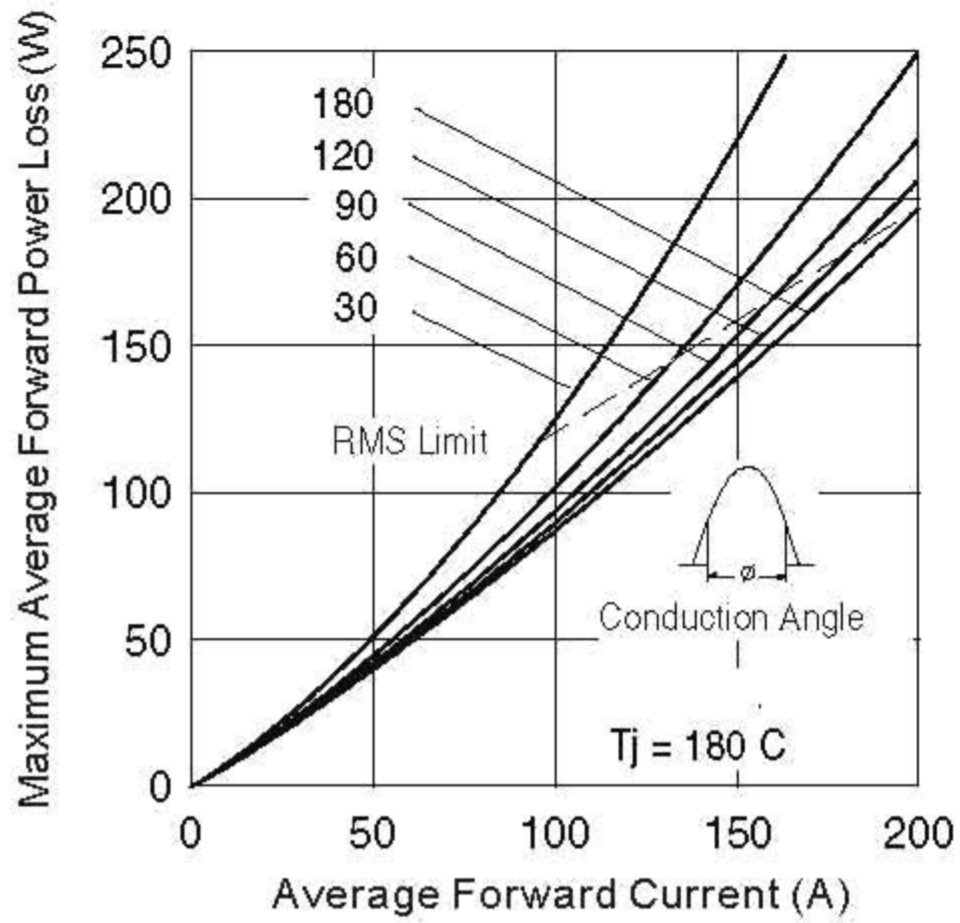


Fig. 3 - Forward Power Loss Characteristics

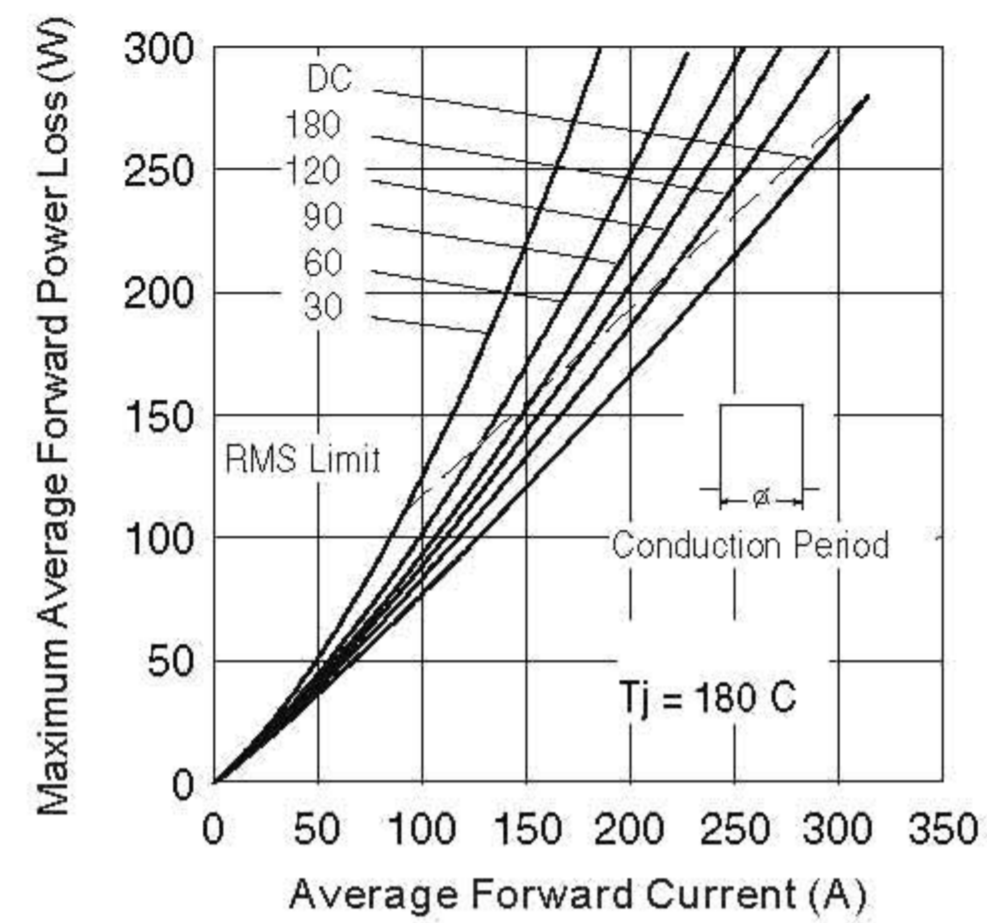


Fig. 4 - Forward Power Loss Characteristics

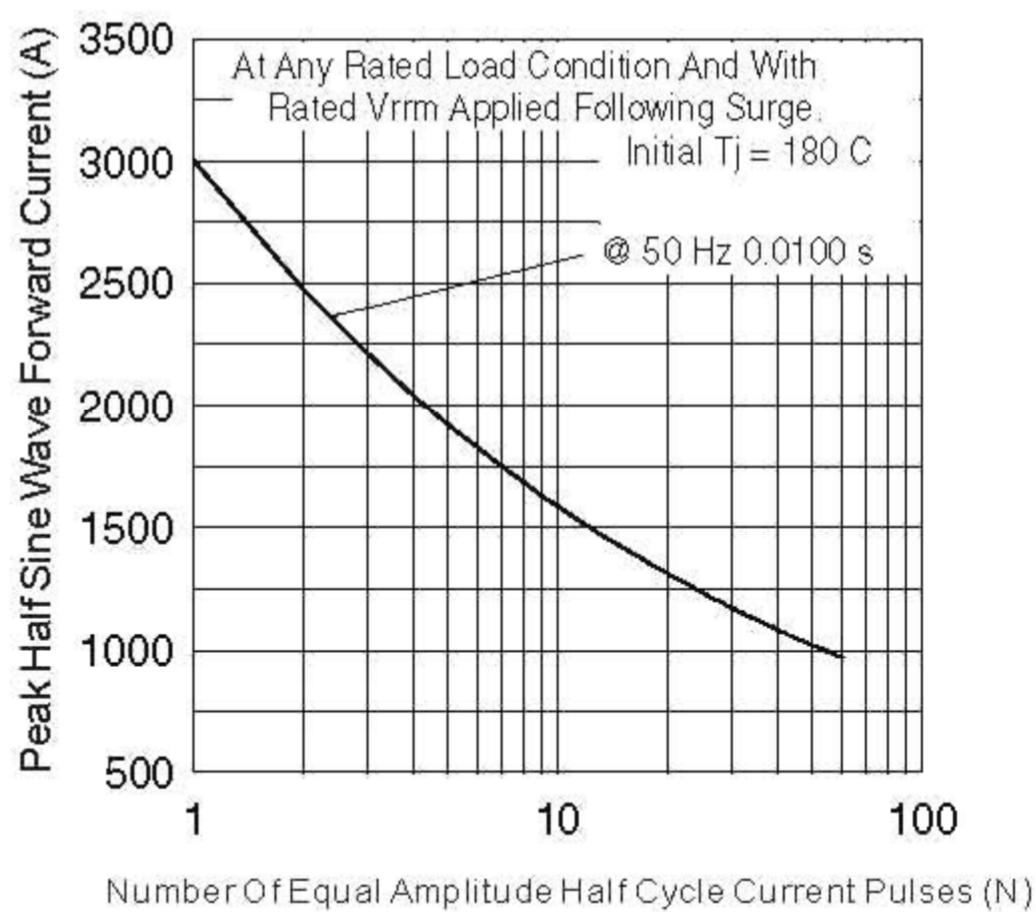


Fig. 5 - Maximum Non-Repetitive Surge Current

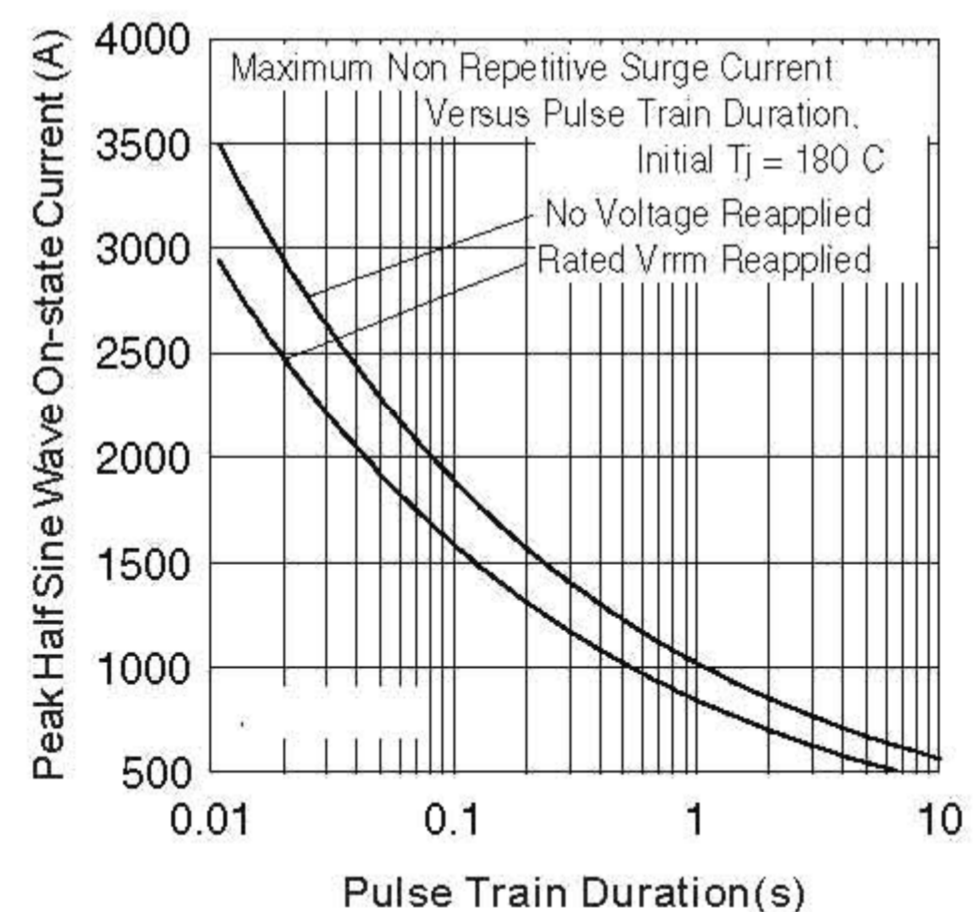


Fig. 6 - Maximum Non-Repetitive Surge Current

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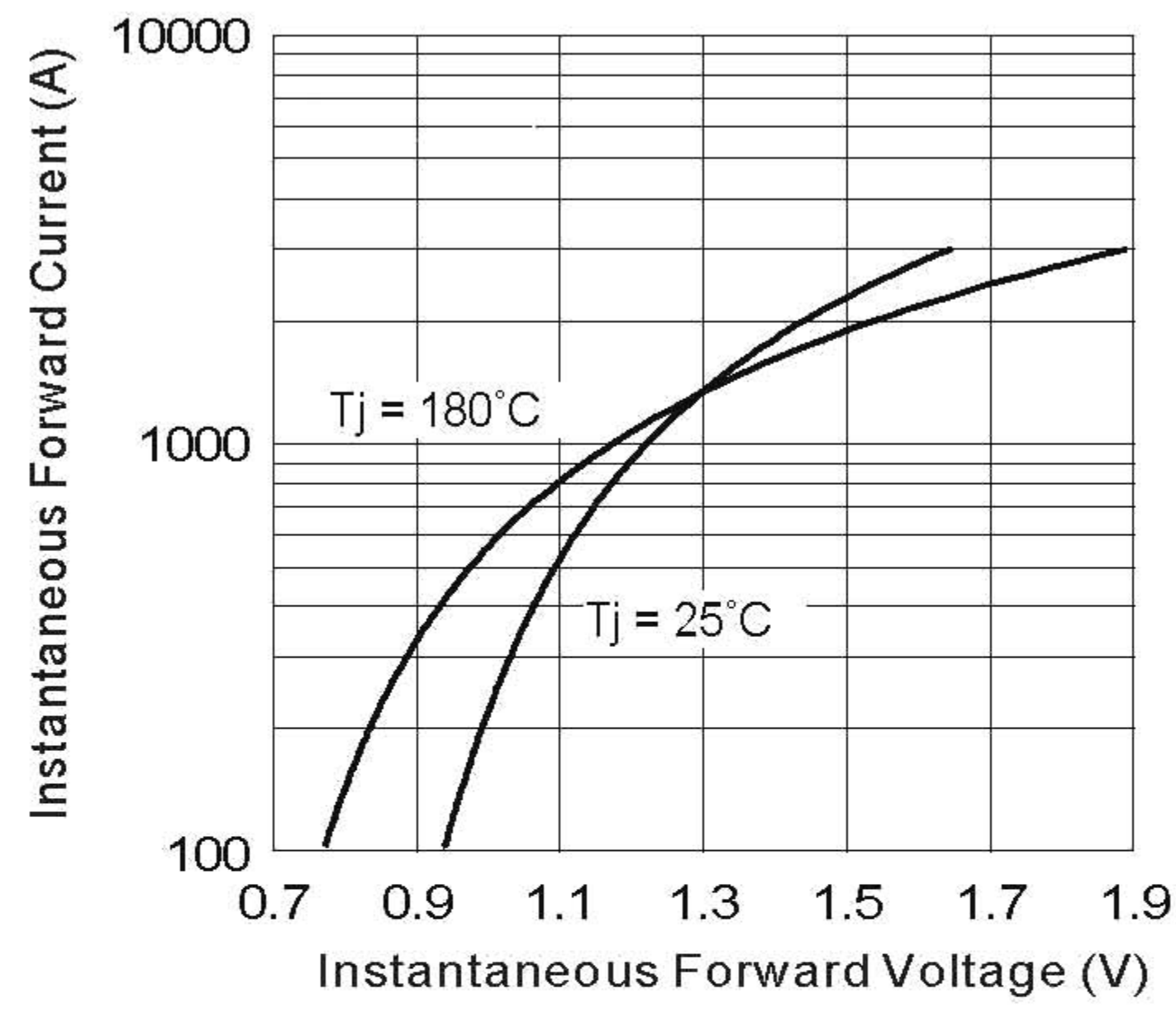


Fig. 7 - Forward Voltage Drop Characteristics

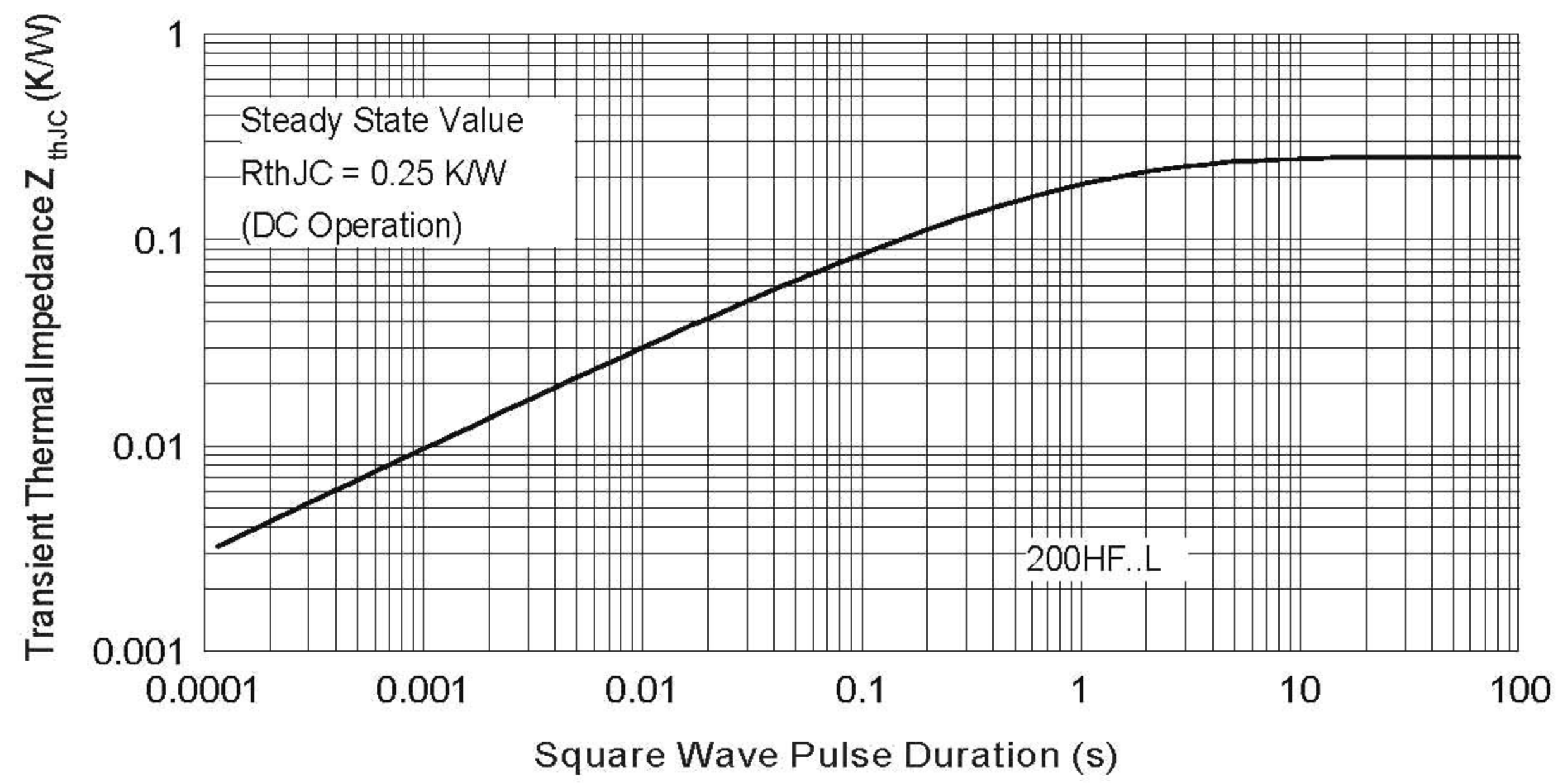


Fig. 8 - Thermal Impedance  $Z_{thJC}$  Characteristic