

Rectifier Diode

W1185LC300 to W1185LC450

The data sheet on the subsequent pages of this document is a scanned copy of existing data for this product.

(Rating Report 87NR6 Issue 1)

This data reflects the old part number for this product which is: SW38-44CXC515. This part number must **NOT** be used for ordering purposes – please use the ordering particulars detailed below.

The limitations of this data are as follows:
No reverse recovery information available

Please use the following link to view an up to date outline drawing for this device
[Outline W4](#)

Where any information on the product matrix page differs from that in the following data, the product matrix must be considered correct

An electronic data sheet for this product is presently in preparation.

For further information on this product, please contact your local ASM or distributor.

Alternatively, please contact Westcode as detailed below.

Ordering Particulars			
W1185	LC	◆◆	0
Fixed Type Code	Fixed Outline Code	Voltage code $V_{\text{DRM}}/100$ 30-45	Fixed Code
Typical Order Code: W1185LC320, 27mm clamp height, 3200V V_{RRM}			

IXYS Semiconductor GmbH
Edisonstraße 15
D-68623 Lampertheim
Tel: +49 6206 503-0
Fax: +49 6206 503-627
E-mail: marcom@ixys.de

IXYS Corporation
3540 Bassett Street
Santa Clara CA 95054 USA
Tel: +1 (408) 982 0700
Fax: +1 (408) 496 0670
E-mail: sales@ixys.net

WESTCODE
An  IXYS Company

www.westcode.com

www.ixys.com

Westcode Semiconductors Ltd
Langley Park Way, Langley Park,
Chippenham, Wiltshire, SN15 1GE.
Tel: +44 (0)1249 444524
Fax: +44 (0)1249 659448
E-mail: WSL.sales@westcode.com

Westcode Semiconductors Inc
3270 Cherry Avenue
Long Beach CA 90807 USA
Tel: +1 (562) 595 6971
Fax: +1 (562) 595 8182
E-mail: WSI.sales@westcode.com

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In the interest of product improvement, Westcode reserves the right to change specifications at any time without prior notice.

Devices with a suffix code (2-letter, 3-letter or letter/digit/letter combination) added to their generic code are not necessarily subject to the conditions and limits contained in this report.

QUALITY EVALUATION LABORATORY

Rating Report: 87NR6

Date: 27th March, 1987

Pages: 10

Diode Type SW38-44CXC515

Written by:

M.W. Jundup

Checked:

M.W. Jundup

Approved:

B. Lee H.

This diode consists of an all diffused 38 mm diameter silicon slice mounted in a cold weld capsule housing.

This Report supersedes Rating Report No. 78NR15.

Ratings

Voltage Grades	:	38-44
V_{RSM}	:	3900-4500V
V_{RRM}	:	3800-4400V
$I_F(AV)$: Single Phase; 50 Hz, 180° half sinewave;		
Double side cooled $T_{HS} = 55^\circ C, 100^\circ C$	:	1186, 833A
Single side cooled $T_{HS} = 100^\circ C$	:	528A
I_F (rms) max.)		
Double side cooled $T_{HS} = 25^\circ C$	:	2171A
I_F max.)		
	:	1936A
I_{FSM} : $t = 10ms$ half sinewave; T_J (initial) = $180^\circ C$;		
$V_{RM} = 0.6 V_{RRM}(Max)$	:	9200A
I_{FSM} ; $t = 10ms$ half sinewave; T_J (initial) = $180^\circ C$; $V_{RM} \leq 10V$	:	10,580A
I^2t : $t = 10ms$; T_J (initial) = $180^\circ C$; $V_{RM} = 0.6 V_{RRM}(Max)$	:	$0.423 \times 10^6 A^2 SECS$
I^2t : $t = 10ms$; T_J (initial) = $180^\circ C$; $V_{RM} \leq 10V$	:	$0.559 \times 10^6 A^2 SECS$
I^2t : $t = 3ms$; T_J (initial) = $180^\circ C$; $V_{RM} \leq 10V$	:	$0.416 \times 10^6 A^2 SECS$
T_{HS} Operating range	:	-55 to $+160^\circ C$
T_{stg} ; Non-operating	:	-55 to $+185^\circ C$

Characteristics

(Maximum values unless stated otherwise)

$V_O : T_J = 160^\circ\text{C}$	:	1.0V
$r_s : T_J = 160^\circ\text{C}$	:	0.575mohm
$V_{FM} : I_{FM} = 2420\text{A } T_{VJ} = 160^\circ\text{C}$	:	2.4V
$R_{th}(J-HS)$ Double side cooled	:	0.033°C/watt
Single side cooled	:	0.065°C/watt
$I_{RRM} : T_J = 160^\circ\text{C } V_{RM} = V_{RRM}(\text{Max})$	:	30mA
$Q_{rr} : I_{TM} = \quad dI/dt =$	:	
$V_{RM} = \quad T_{VJ} =$	:	
Mounting Force	:	1000-2000 Kgf
Outline drawing	:	100A243
Jedec Outline No.	:	DO-200AB

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Changes to Rating Report No. 78NR15

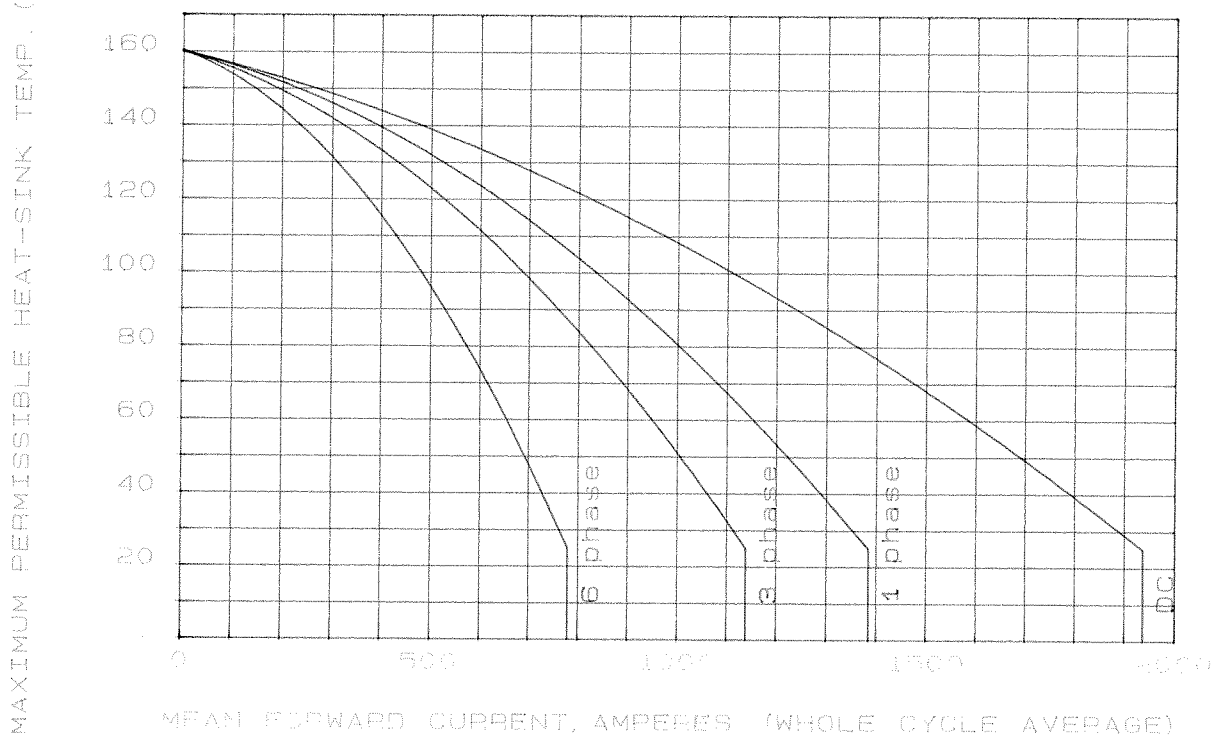
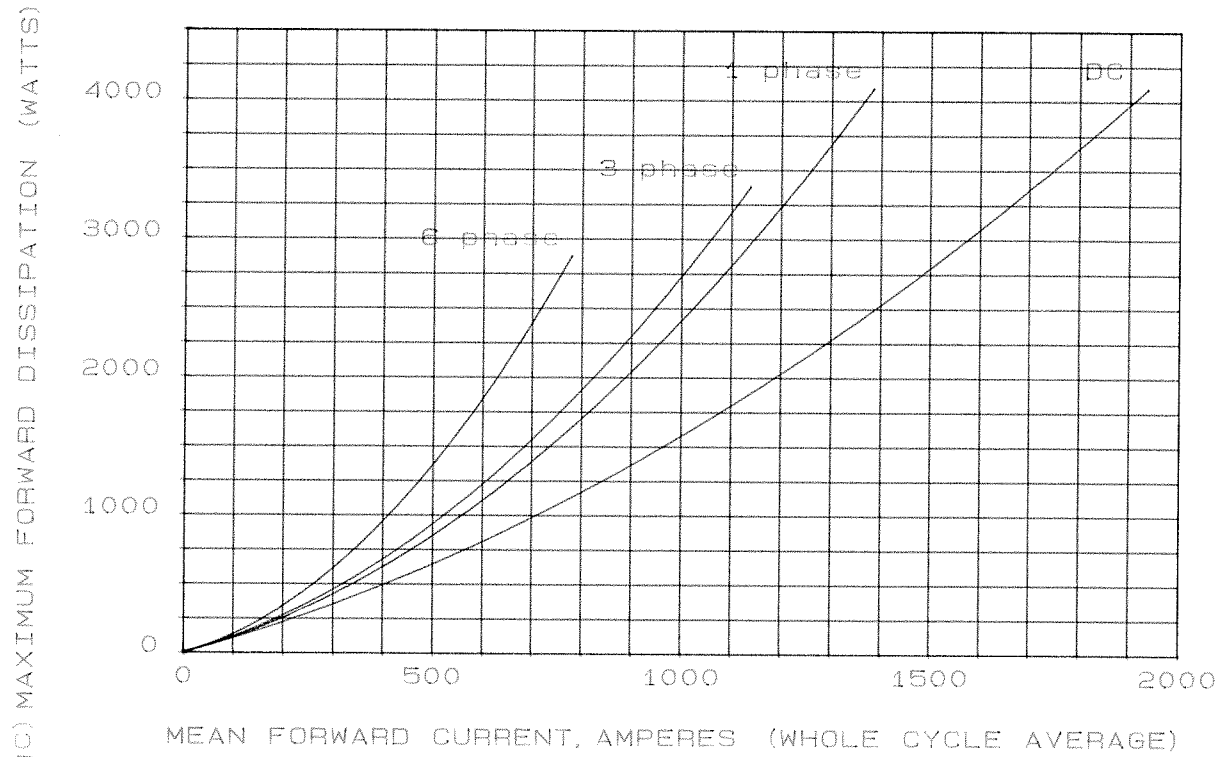
- P1 : I_{F(AV)} at T_{HS} = 55°C changed)
 I_{F(AV)} at T_{HS} = 100°C added) D.S.C.
 I_{F(AV)} at T_{HS} = 100°C changed - S.S.C.
 I_{F(rms)} MAX changed
 T_{HS(MIN)} reduced to - 40°C
- P2 : JEDEC outline No. added
- P5-9 : Redrawn with changes on p5 and p6.

Voltage Ratings

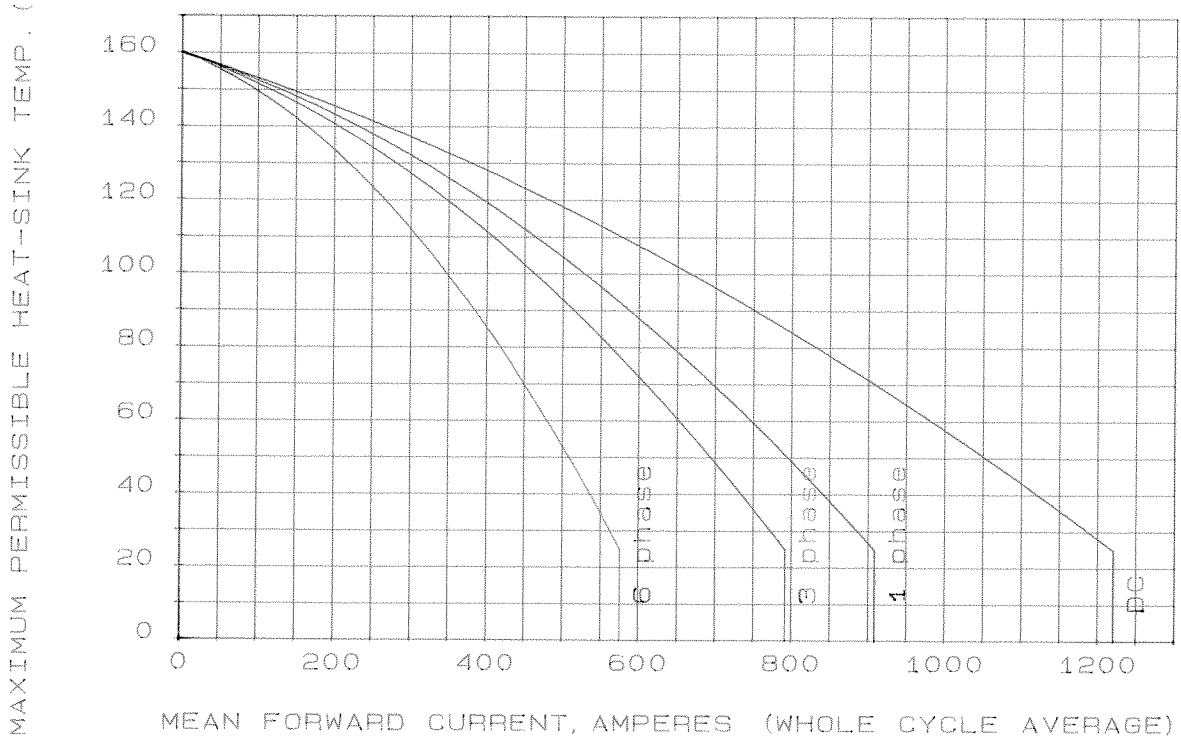
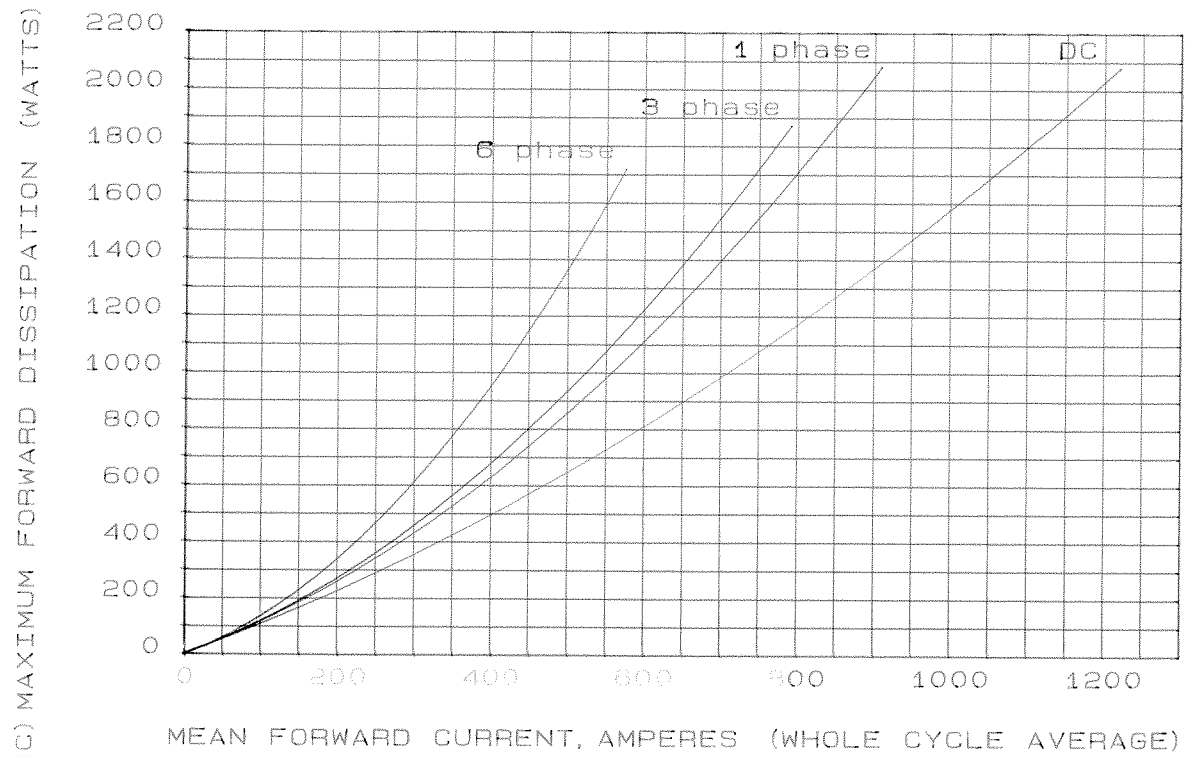
Voltage Class SW	V _{RRM}	V _{RSM} V
38	3800	3900
40	4000	4100
42	4200	4300
44	4400	4500

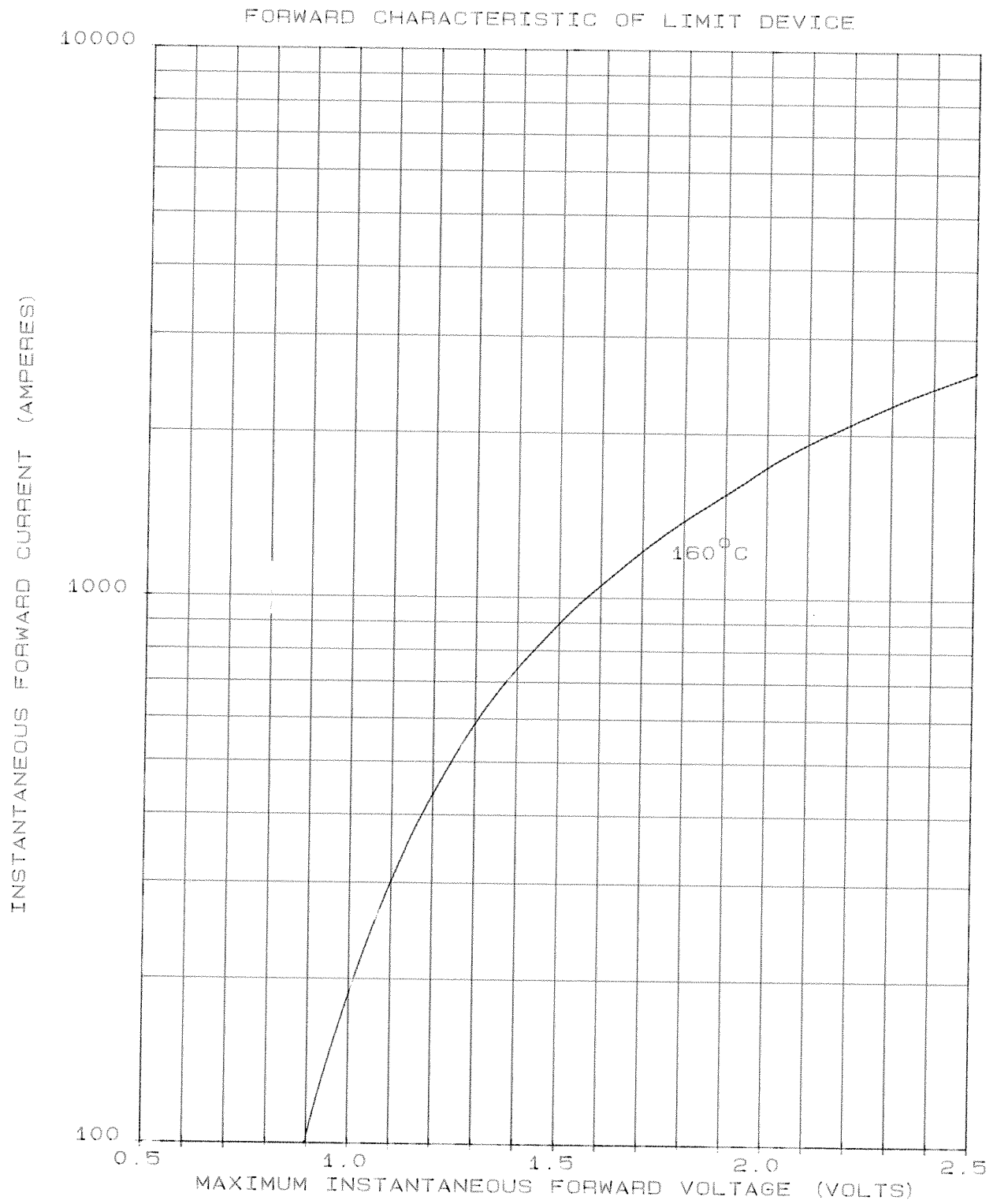
This report is applicable to higher or lower voltage grades when supply has been agreed by Sales/Production.

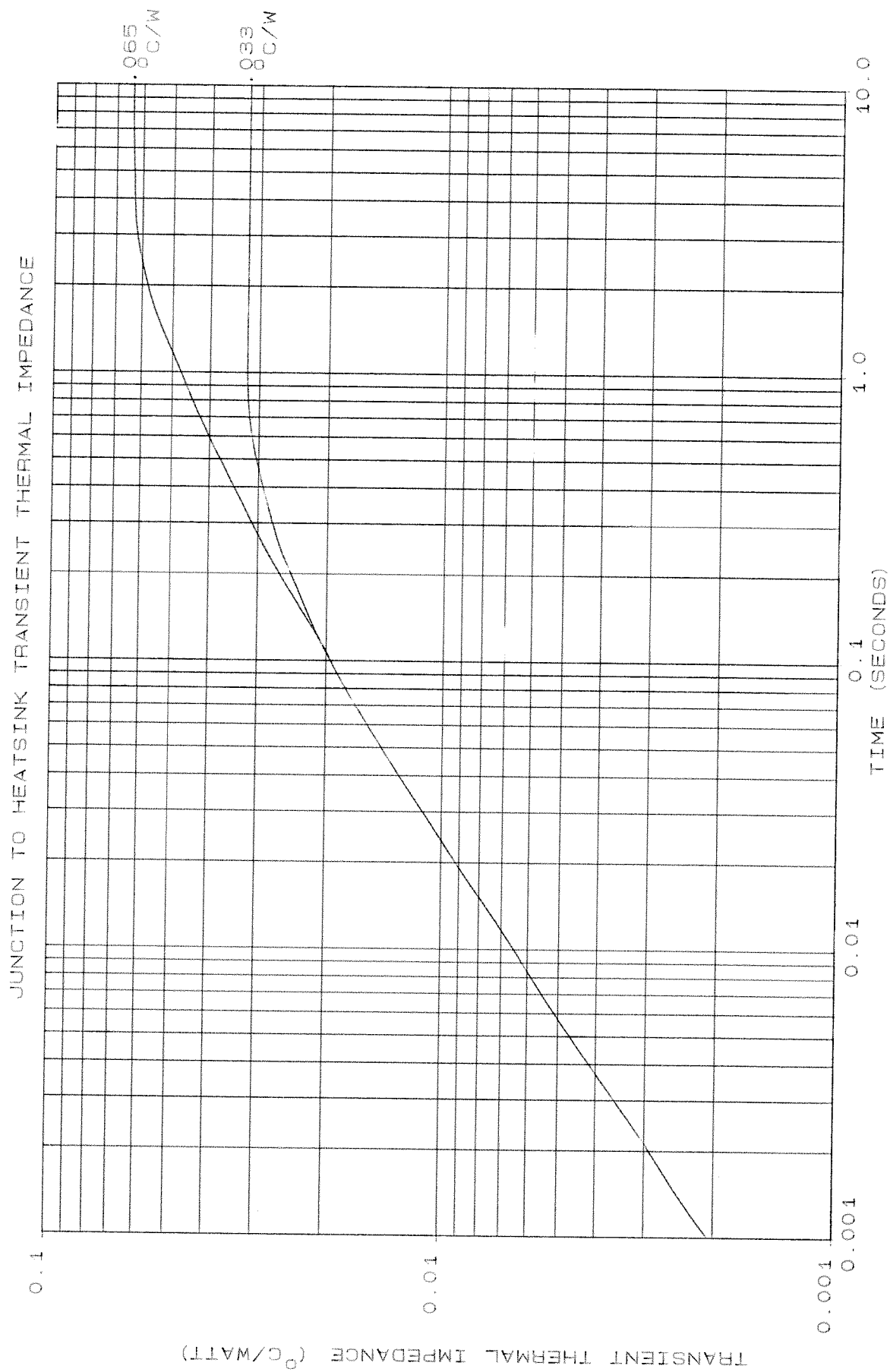
DOUBLE SIDE COOLED



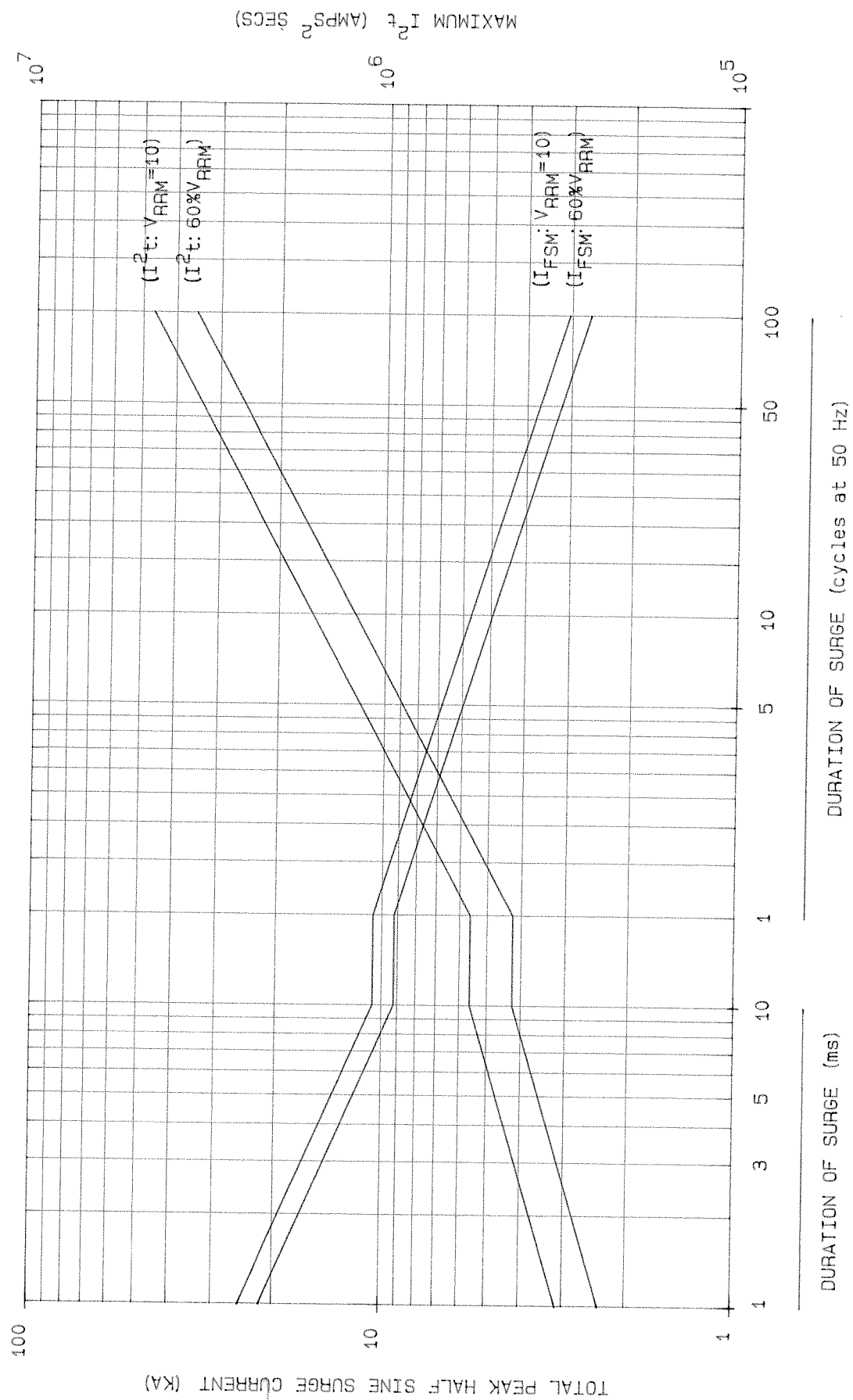
SINGLE SIDE COOLED







MAXIMUM NON REPETITIVE SURGE CURRENT AT INITIAL JUNCTION TEMPERATURE 160°C

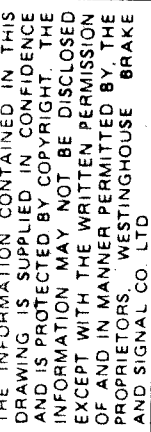


INTERNATIONAL OUTLINE No. DO - 200 AB
WEIGHT. 340 GRAMS.
FINISH. ET TO BS 1872
- 10 -
DEVICE MARKING INCLUDES MONOGRAM, TYPE No., SPEC.
No. AND POLARITY SYMBOL.
DEVICE MOUNTING: CLAMPING FORCE :
1000 - 2000 kgf.

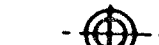
	TYPE NUMBER
CXC 935	CXC 220
CXC 805	CXC 224
CXC 635	CXC 474
CXC 595	CXC 524
CXC 515	CXC 724

CLAMPING FORCE TO BE APPLIED ON $\frac{1}{2}$ OF LOCATION HOLES & BE EVENLY DISTRIBUTED OVER AREA OF CONTACT. FLATNESS TOL ON SURFACES TO WHICH DEVICE IS CLAMPED TO BE 0.04 WIDE.

G.A. DRG. No. 159B100H204



WESTINGHOUSE BRAKE AND SIGNAL CO. LTD.
CHIPPENHAM, WILTSHIRE, SN15 1JD, ENGLAND.

	WESTCODE® SEMICONDUCTORS
THIRD ANGLE PROJECTION	
	
DIMNS. IN MILLIMETRES	
DRG. No.	
100A243	