

Rectifier Diode

W1411LC300 to W1411LC360

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

(Rating Report 87NR11 Issue 1)

This data reflects the old part number for this product which is: SW30-36CXC595. 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			
W1411	LC	◆◆	0
Fixed Type Code	Fixed Outline Code	Voltage code $V_{DRM}/100$ 30-36	Fixed Code
Typical Order Code: W1411LC340, 27mm clamp height, 3400V V_{RRM}			

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QUALITY EVALUATION LABORATORY

Rating Report: 87NR11

Date: 11th June, 1987

Pages: 10

Diode Type SW30-36CXC595

Written by: *mhw. Dunlop*

Checked: *mhw.*

Approved: *B. J. 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. 78NR14.

Ratings

Voltage Grades	:	30-36
V_{RSM}	:	3100-3700V
V_{RRM}	:	3000-3600V
$I_{F(AV)}$: Single Phase; 50 Hz, 180° half sinewave;		
Double side cooled $T_{HS} = 55^{\circ}C, 100^{\circ}C$:	1415A; 1000A
Single side cooled $T_{HS} = 100^{\circ}C$:	620A
I_F (rms) max.)	:	2590A
) Double side cooled $T_{HS} = 25^{\circ}C$:	2288A
I_{FSM} : t = 10ms half sinewave; T_J (initial) = 160°C;		
$V_{RM} = 0.6 V_{RRM}(\text{Max})$:	10,600A
I_{FSM} ; t = 10ms half sinewave; T_J (initial = 160°C; $V_{RM} \leq 10V$:	12,200A
I^2t : t = 10ms; T_J (initial) = 160°C; $V_{RM} = 0.6 V_{RRM}(\text{Max})$:	$0.562 \times 10^6 A^2 SECS$
I^2t : t = 10ms; T_J (initial) = 160°C; $V_{RM} \leq 10V$:	$0.744 \times 10^6 A^2 SECS$
I^2t : t = 3ms; T_J (initial) = 160°C; $V_{RM} \leq 10V$:	$0.55 \times 10^6 A^2 SECS$
T_{HS} Operating range	:	-40 to +160°C
T_{stg} ; Non-operating	:	-40 to 185°C

Characteristics

(Maximum values unless stated otherwise)

$V_0 : T_J = 160^\circ\text{C}$:	0.9V
$r_s : T_J = 160^\circ\text{C}$:	0.388mohms
$V_{FM} : I_{FM} = 2870\text{A } T_{VJ} = 160^\circ\text{C}$:	2.0V
$R_{th}(\text{J-HS})$ Double side cooled	:	0.033°C/W
Single side cooled	:	0.065°C/W
$I_{RRM} : T_J = 160^\circ\text{C } V_{RM} = V_{RRM}(\text{Max})$:	30mA
$Q_{rr} : I_{TM} = \quad dI/dt =$:	
$V_{RM} = \quad T_{VJ} =$:	
Mounting Force	:	1000-2000Kg.f
Outline drawing	:	100A243
Jedec Outline No.	:	D0200AB

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Changes to Rating Report No. 78NR14

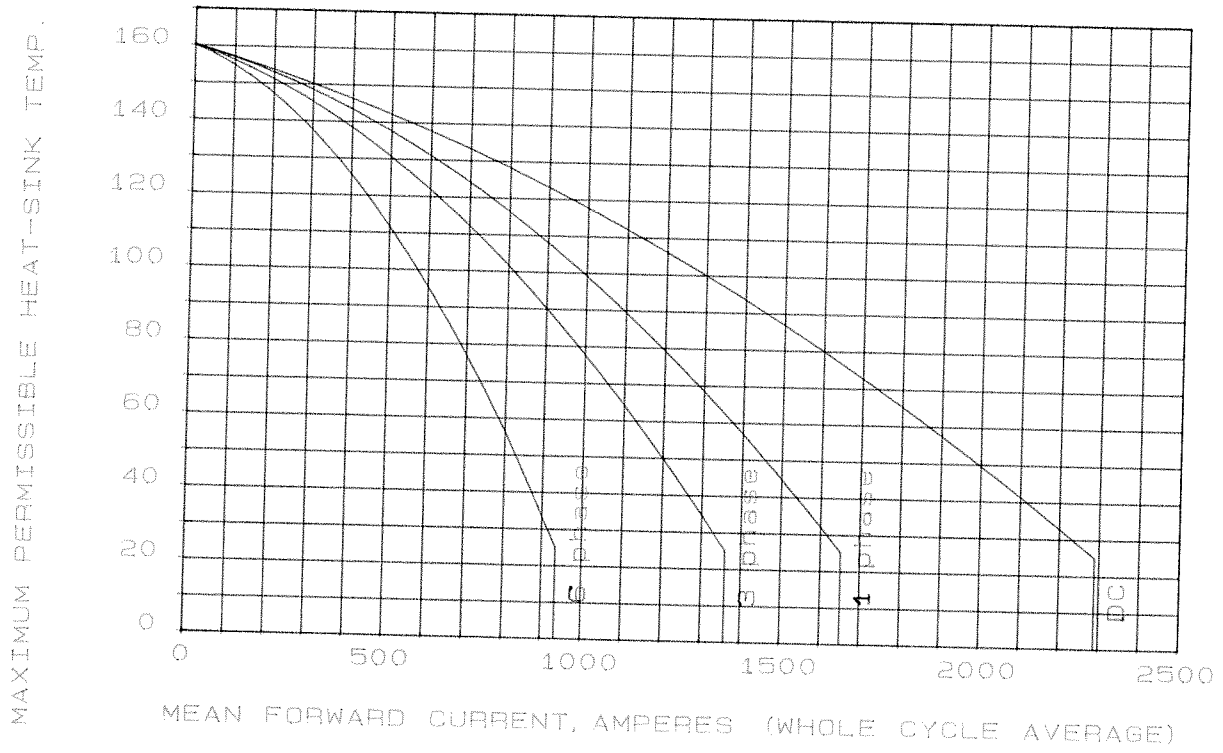
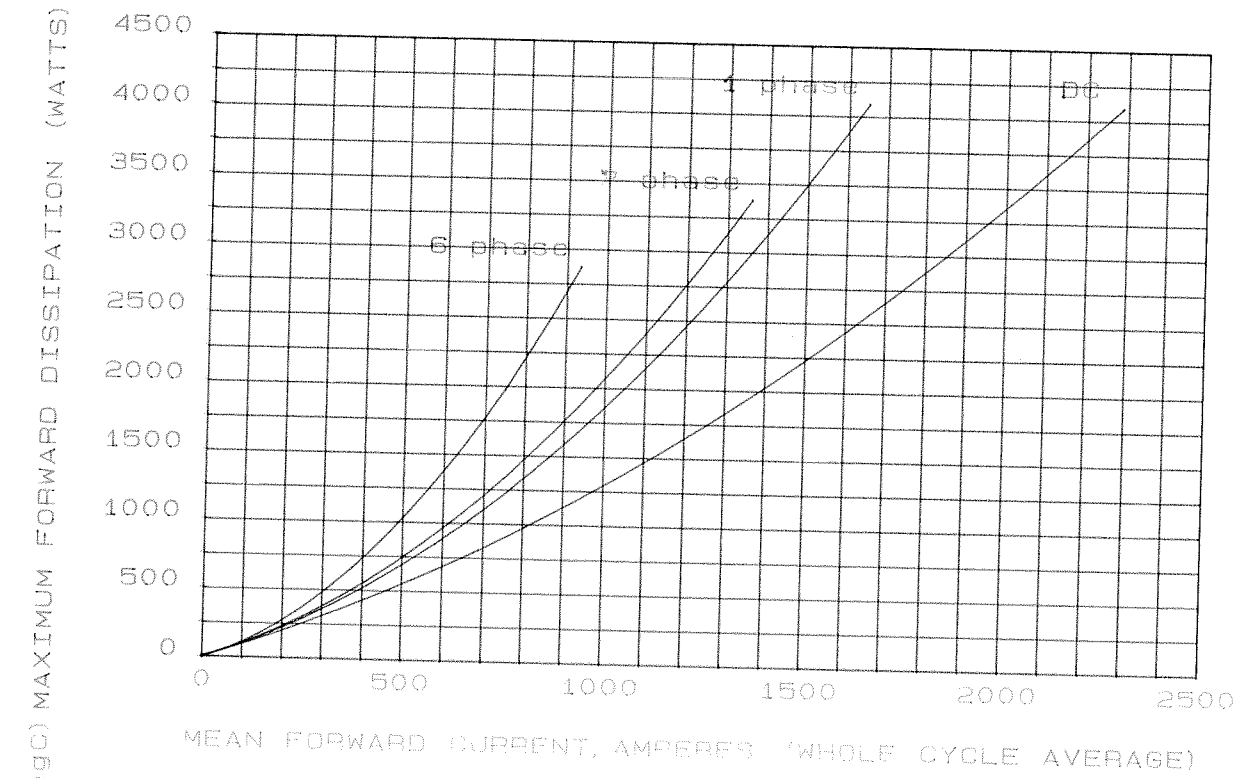
- p1 : Min. grade changed
 - $I_{F(AV)}$, I_{rms} changed
 - I^2t_2 , I^2t ($t = 3$ ms) corrected
 - $T_{HS(MIN)}$ reduced to $-40^\circ C$
- p2 : JEDEC outline No. added
- p4 : Min. grade changed
- pp5-9 : Re-drawn with changes on p5 and p6

Voltage Ratings

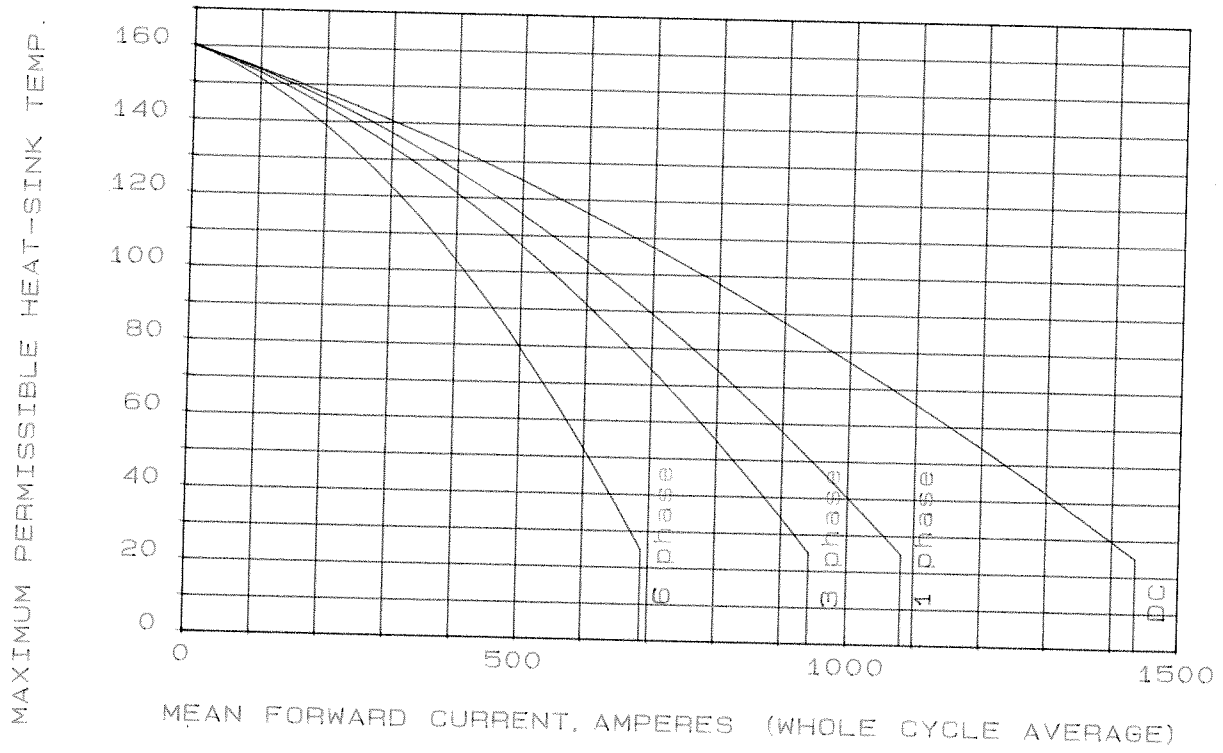
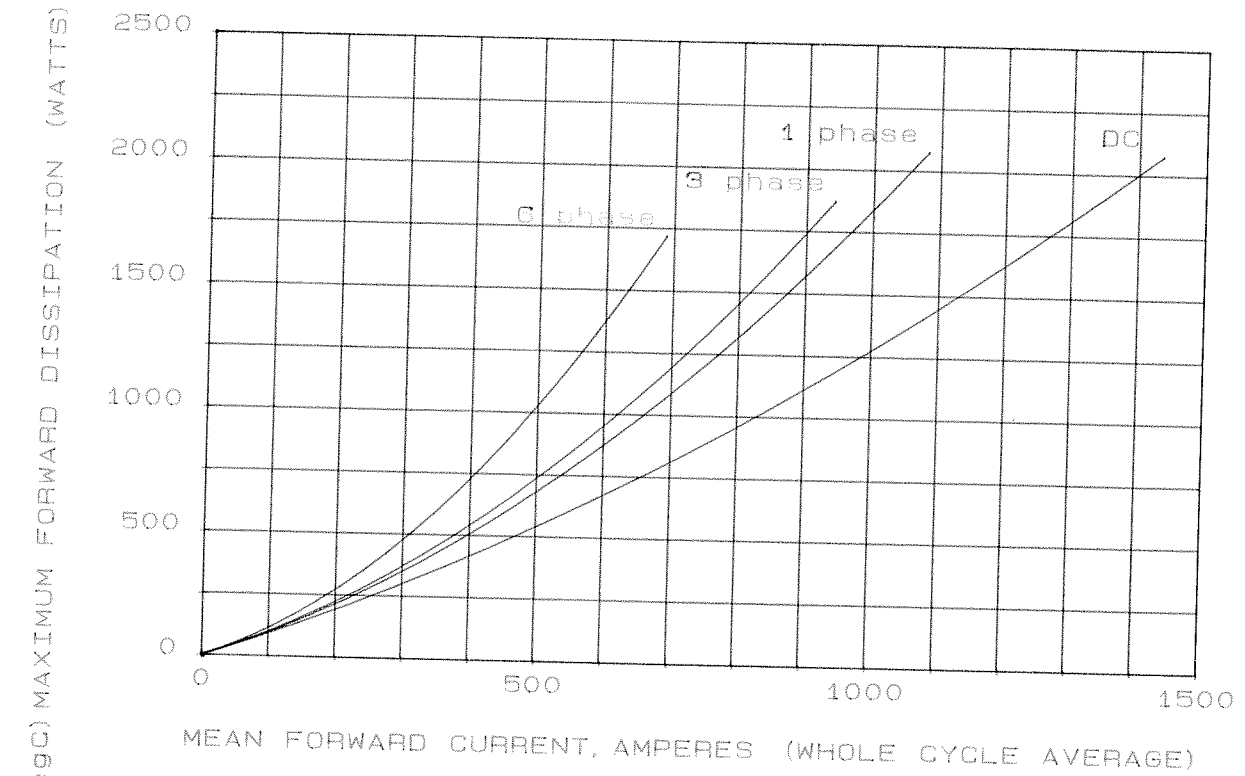
Voltage Class SW	V_{RRM}	V_{RSM} V
30	3000	3100
32	3200	3300
34	3400	3500
36	3600	3700

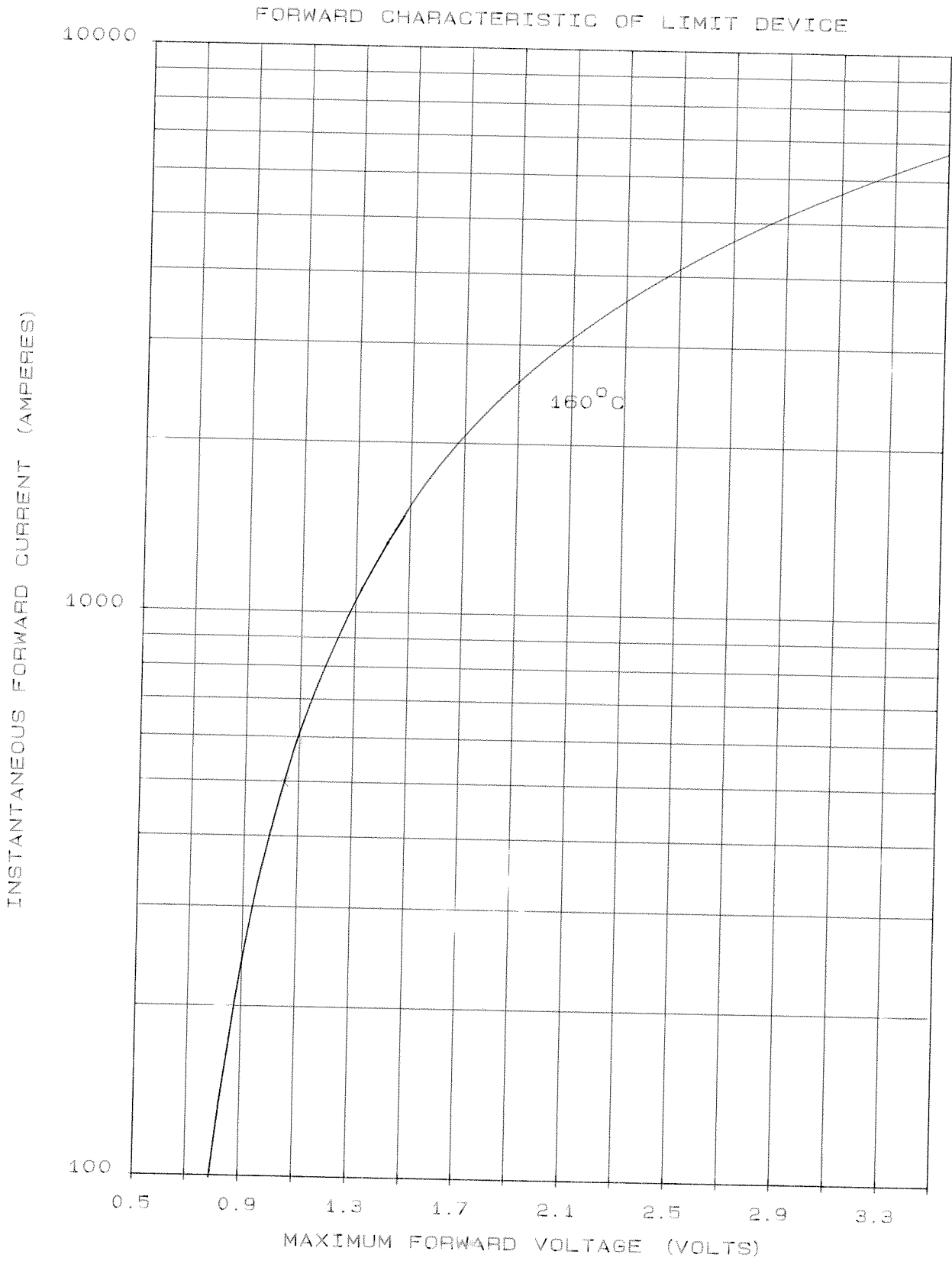
This report is applicable to higher or lower voltage grades when supply has been agreed by Sales/Production.

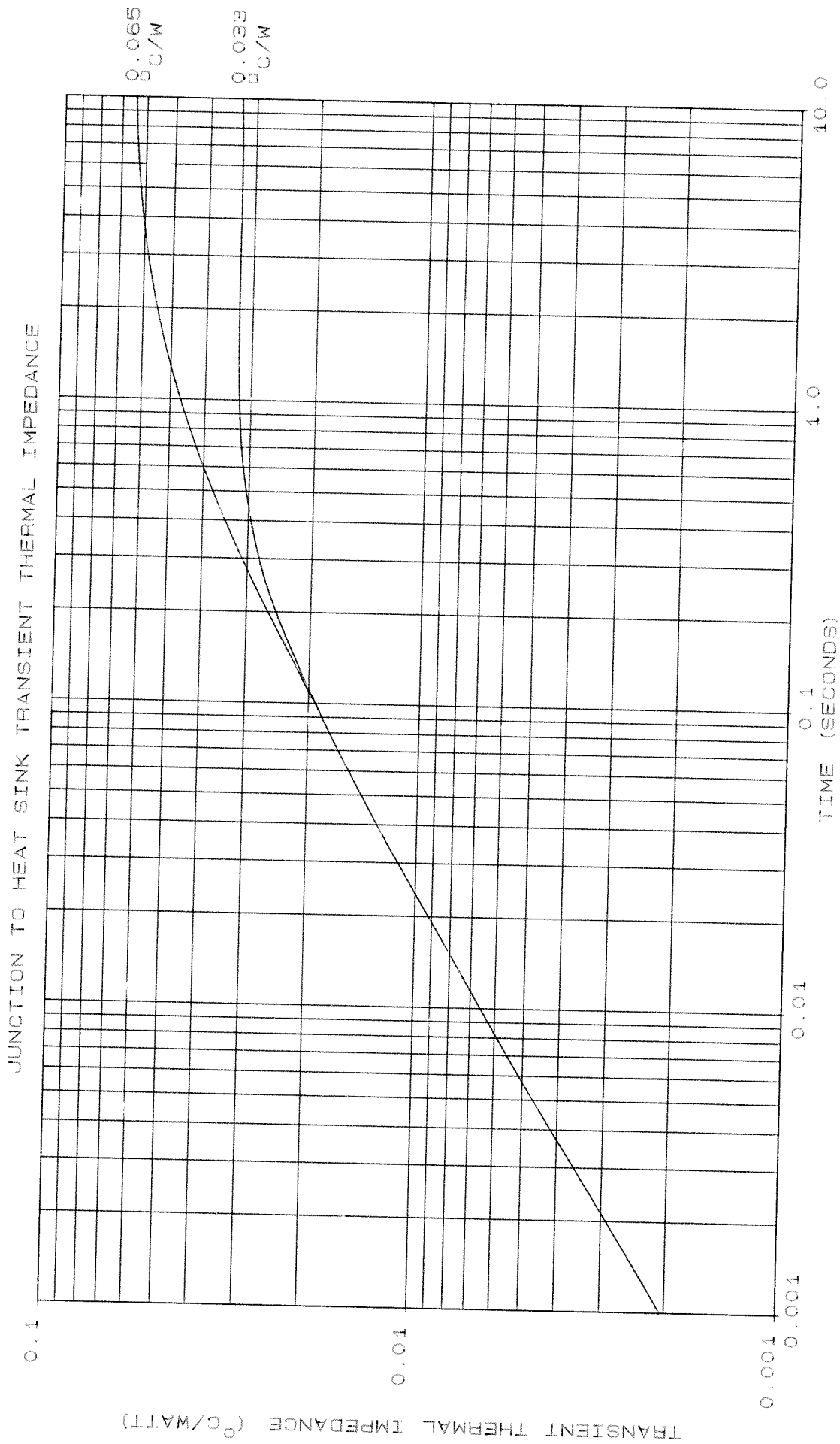
DOUBLE SIDE COOLED



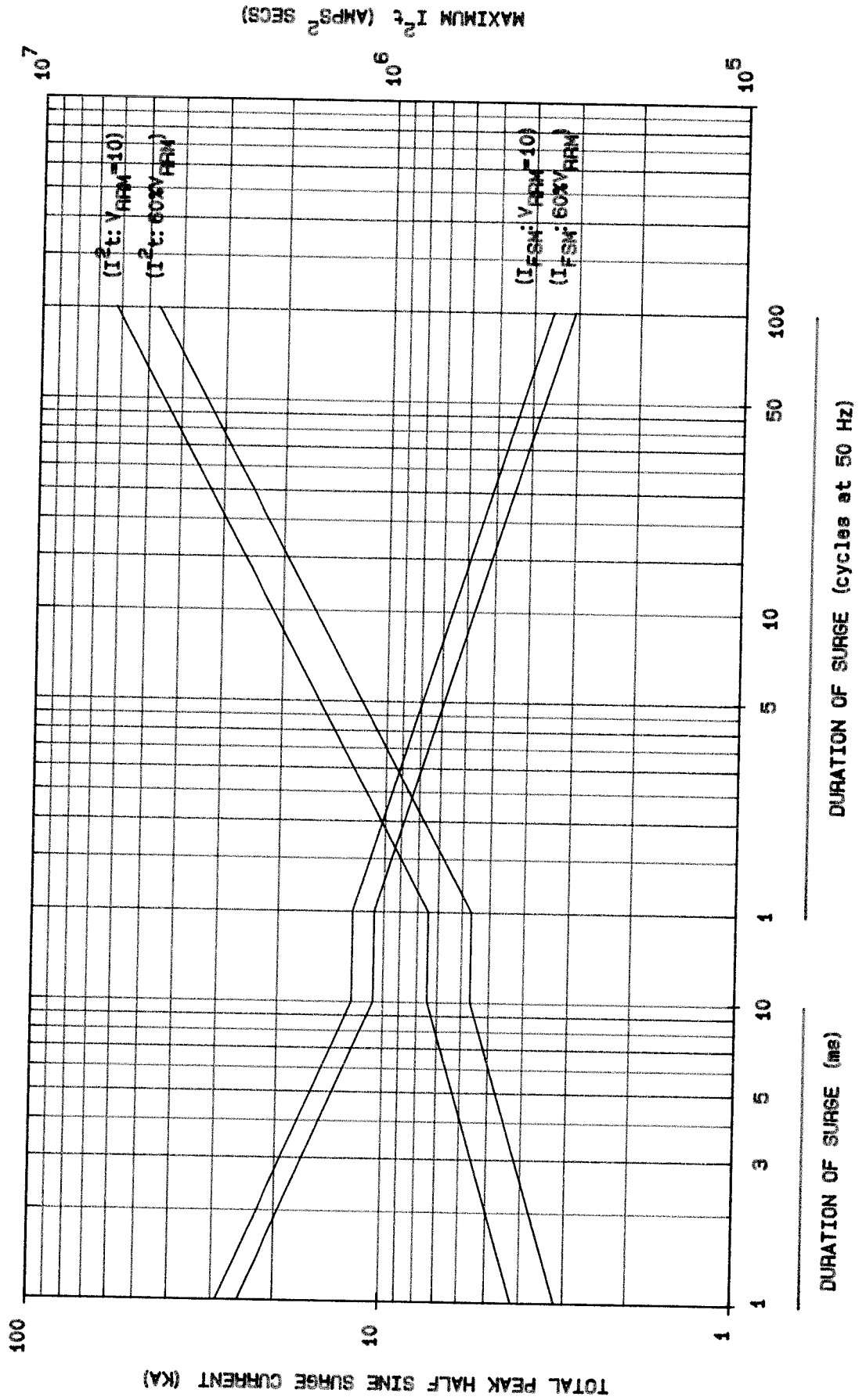
SINGLE SIDE COOLED







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



MAXIMUM I^2t (AMPS² SECS)

10⁷
10⁶
10⁵

100
10
1

TOTAL PEAK HALF SINE SURGE CURRENT (KA)

DURATION OF SURGE (ms)

DURATION OF SURGE (cycles at 50 Hz)

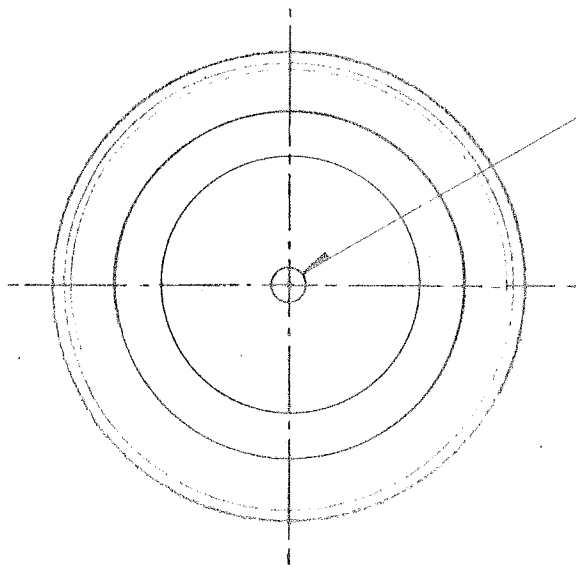
SCALE	1/1
DRN	<i>[Signature]</i>
CHKD	<i>[Signature]</i>
APPD	
GEC 1	
CS 1	
QA 1	
LP 2	
HP 2	
A	
S	NI

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

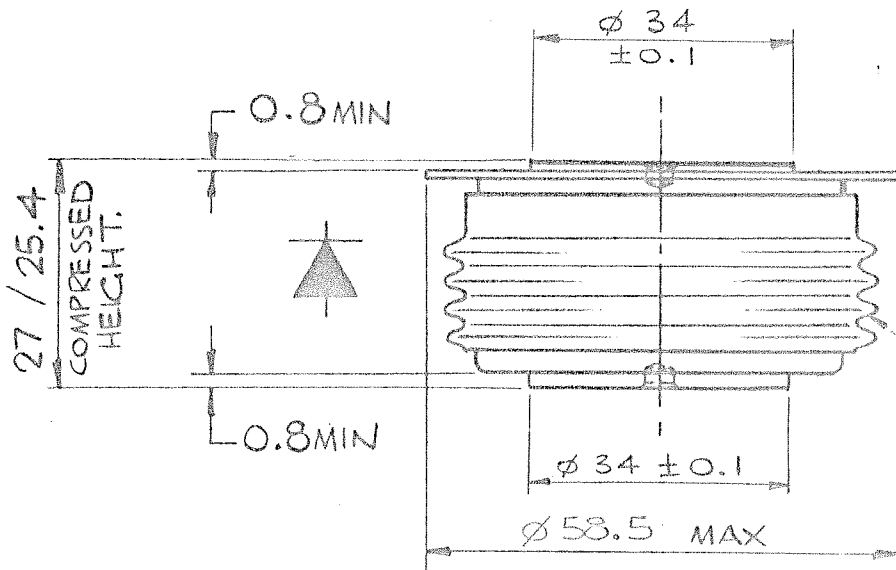
TYPE NUMBER	
CXC 935	CXC 220
CXC 805	CXC 224
CXC 835	CXC 474
CXC 595	CXC 524
CXC 515	CXC 724
CXC 374	

CLAMPING FORCE TO BE APPLIED ON ϕ 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



$\phi 3.6/3.5 \times 1.9$ MIN
 DEPTH 2-HOLES.
 ONE IN CATHODE
 AND ONE IN ANODE.



CREEP PATH
 25 MIN.

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WESTCODE[®]
 SEMICONDUCTORS

THIRD ANGLE PROJECTION



DIMNS. IN MILLIMETRES

DRG. No.

100A243

ISS	REVISIONS
1	7.9.77 P188
2	P304 15.5.78 $\phi 34$ WAS $\phi 38$, 1.9 MIN WAS 3 MIN, 0.8 MIN WAS 0.5 & 1.5 MIN. <i>lbs</i>
3	12.9.78 $\phi 58.5$ WAS $\phi 60$. CLAMP FORCE WAS 000-1800kgf. <i>lbs</i>
4	12.10.78 TYPE CHANGED <i>lbs</i>