

FrelTec

Mathildenstr. 10A
82319 Starnberg
Germany

High Voltage Rectifier
2CL

2CL

SPECIFICATION

683	2CL7_Axxxx	2CLX	B05
Type	Type	Package	Packing
683: High Voltage Rectifier	2CL7_A	2CL	B05: tape in box (paper tape) for 5k pc

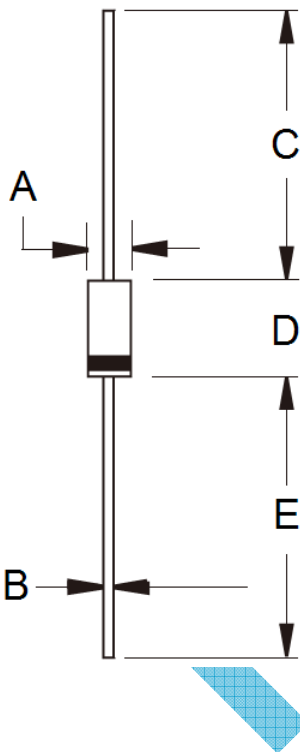
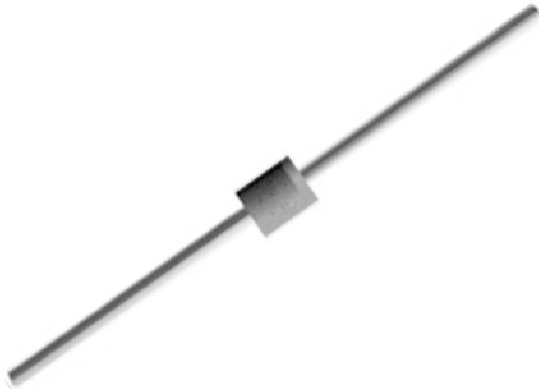
All products according to RoHS (2015/863/EU)

FrelTec

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FrelTec
High Voltage Rectifier
2CL7_A

PACKAGE OUTLINE



DIM.	Unit (mm)	
	Min	Max
A	2,3	2,7
B	0,47	0,53
C	26 min	-
D	9,8	10,2
E	26 min	-

2CL

Maximum Ratings & Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbols	2CL70A	Unit
Repetitive Peak Reverse Voltage	VRRM	6	KV
Average Forward Current	IF(AV)	5 (50HZ half-sine wave, Resistance load Ta=25°C)	mA
Non-Repetitive Forward Surge Current	IFSM	0,5 (50HZ half-sine wave, 1/2 cycle, Ta = 25°C)	A
Ambient Temperature	Tamb	-40 --+100	°C
Maximum Junction Temperature	T(vJ)	120	°C
Storage Temperature	Tstg	-40 --+120	°C

Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified

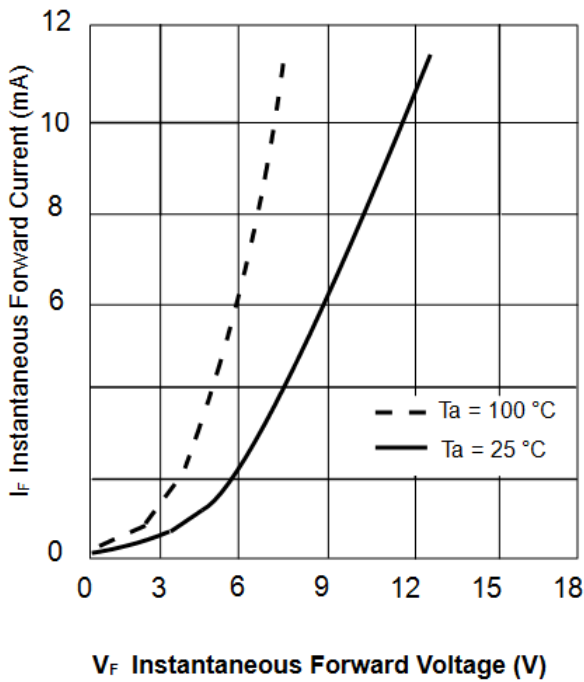
	Symbols	2CL70A	Unit
Forward Voltage Drop IF =10mA	VF	20	V
VR=VRRM Normal Temperature Reverse Current	IRM1	2	µA
TA=100°C VR=VRRM High Temperature Reverse Current	IRM2	5	µA
IF =2mA, I _{rp} =4Ma 1mA recovery Reverse Recovery Time	trr	100	nS

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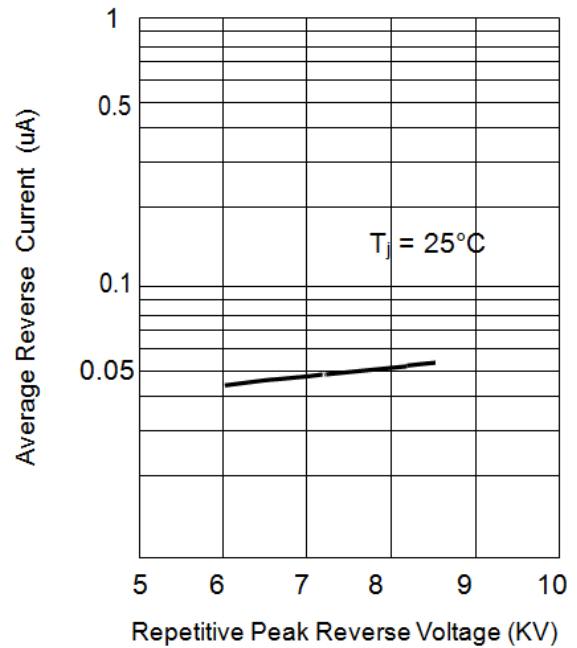
Characteristics(Typical)

2CL70A

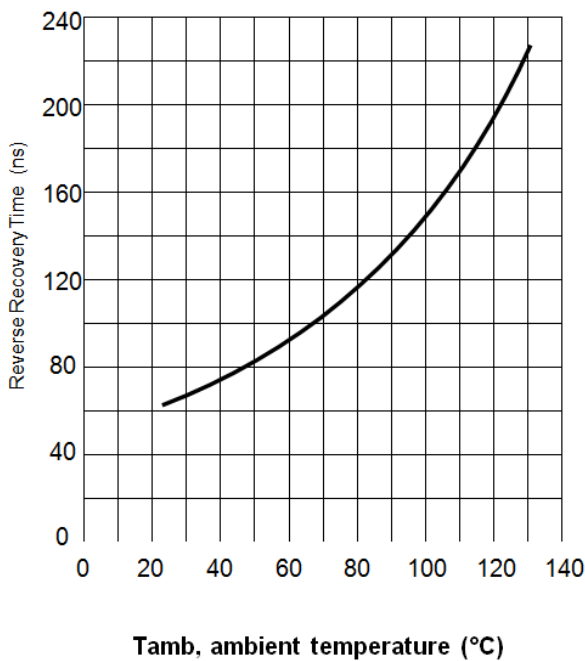
TYPICAL FORWARD CHARACTERISTIC



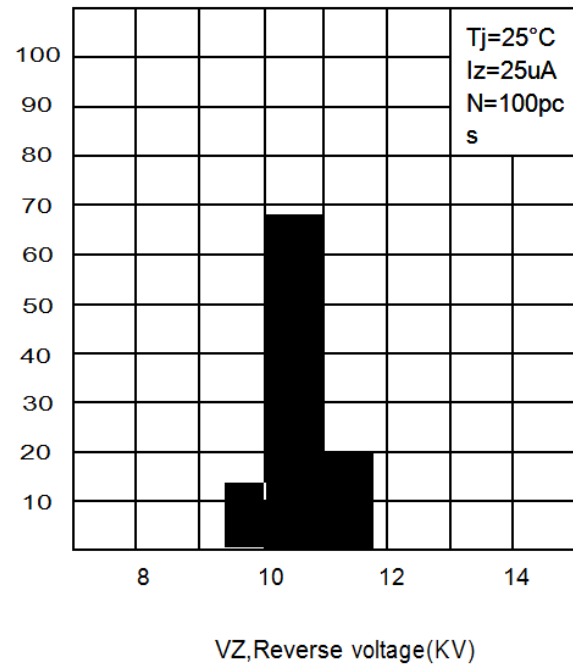
REVERSE CHARACTERISTIC [VR-IR]



REVERSE RECOVERY TIME CHARACTERISTIC [$T_a - T_{rr}$]



REVERSE VOLTAGE CHARACTERISTIC DISTRIBUTION



2CL

Maximum Ratings & Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbols	2CL71A	Unit
Repetitive Peak Reverse Voltage	VRRM	8	KV
Average Forward Current	IF(AV)	5 (50HZ half-sine wave, Resistance load Ta=25°C)	mA
Non-Repetitive Forward Surge Current	IFSM	0,5 (50HZ half-sine wave, 1/2 cycle, Ta = 25°C)	A
Ambient Temperature	Tamb	-40 --+100	°C
Maximum Junction Temperature	T(vJ)	120	°C
Storage Temperature	Tstg	-40 --+120	°C

Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified

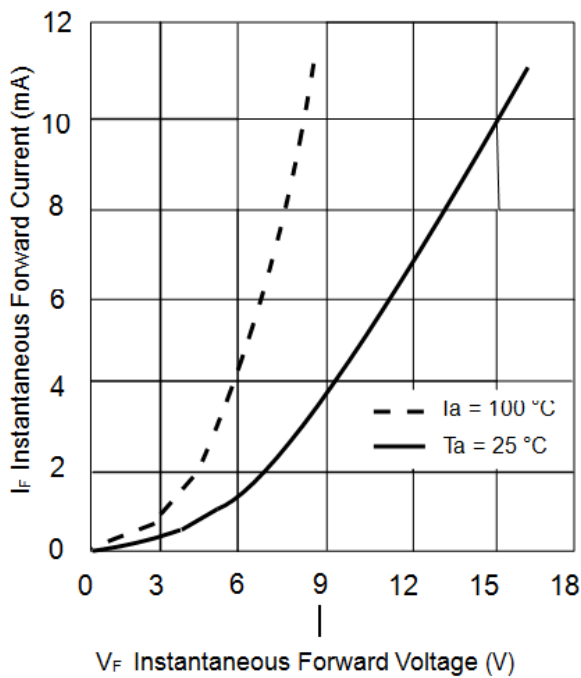
	Symbols	2CL71A	Unit
Forward Voltage Drop IF =10mA	VF	25	V
VR=VRRM Normal Temperature Reverse Current	IRM1	2	µA
TA=100°C VR=VRRM High Temperature Reverse Current	IRM2	5	µA
IF =2mA, I _{rp} =4Ma 1mA recovery Reverse Recovery Time	trr	100	nS

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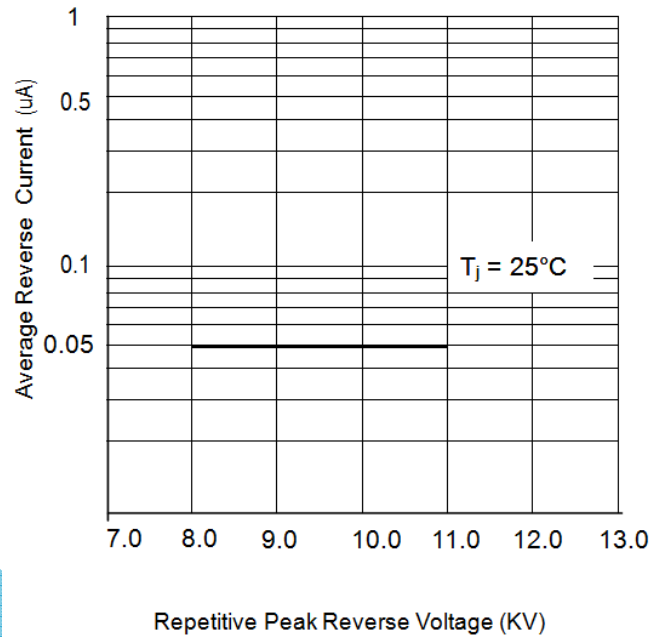
Characteristics(Typical)

2CL71A

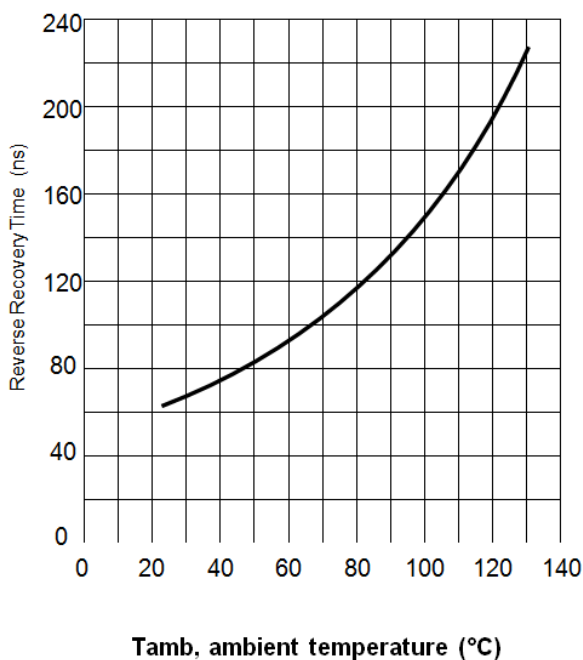
TYPICAL FORWARD CHARACTERISTIC



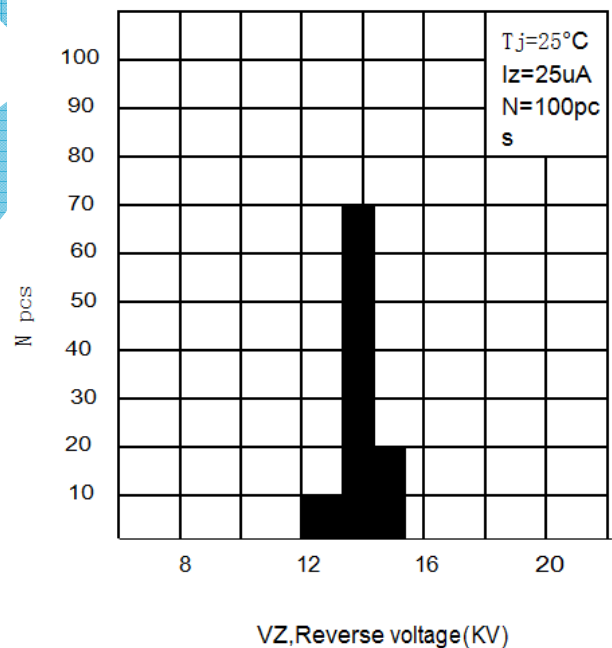
REVERSE CHARACTERISTIC [VR-IR]



REVERSE RECOVERY TIME CHARACTERISTIC [Ta-Trr]



REVERSE VOLTAGE CHARACTERISTIC DISTRIBUTION



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Maximum Ratings & Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbols	2CL72A	Unit
Repetitive Peak Reverse Voltage	VRRM	10	KV
Average Forward Current	IF(AV)	5 (50HZ half-sine wave, Resistance load Ta=25°C)	mA
Non-Repetitive Forward Surge Current	IFSM	0,5 (50HZ half-sine wave, 1/2 cycle, Ta = 25°C)	A
Ambient Temperature	Tamb	-40 --+100	°C
Maximum Junction Temperature	T(vJ)	120	°C
Storage Temperature	Tstg	-40 --+120	°C

Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified

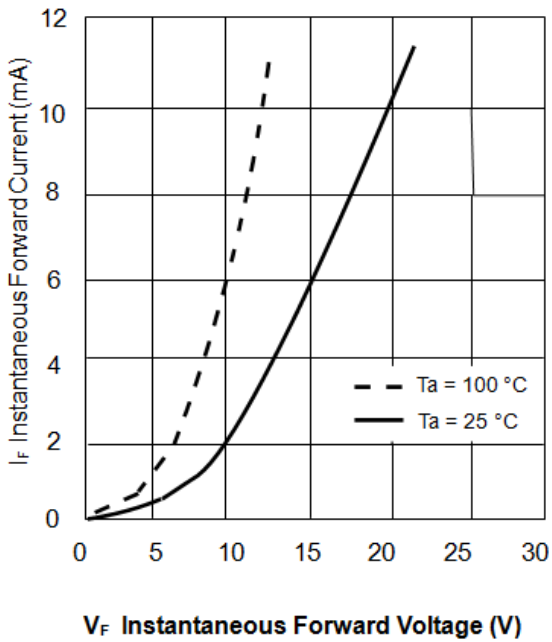
	Symbols	2CL72A	Unit
Forward Voltage Drop IF =10mA	VF	30	V
VR=VRRM Normal Temperature Reverse Current	IRM1	2	µA
TA=100°C VR=VRRM High Temperature Reverse	IRM2	5	µA
IF =2mA, I _{rp} =4Ma 1mA recovery Reverse Recovery Time	trr	100	nS

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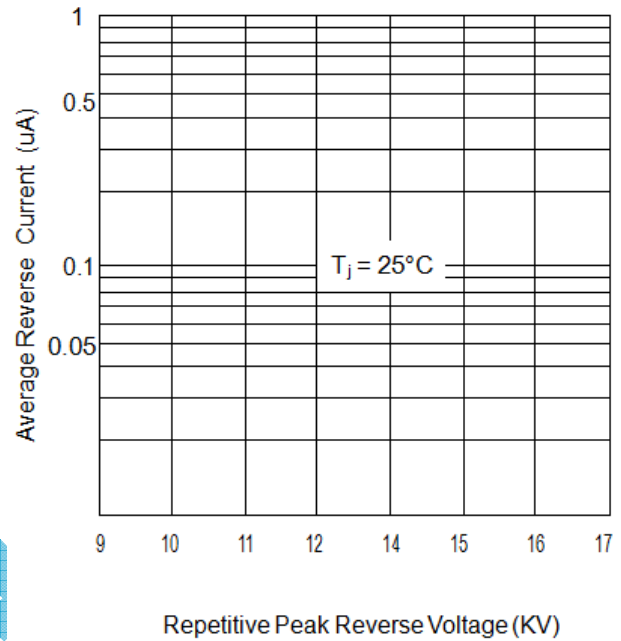
Characteristics(Typical)

2CL72A

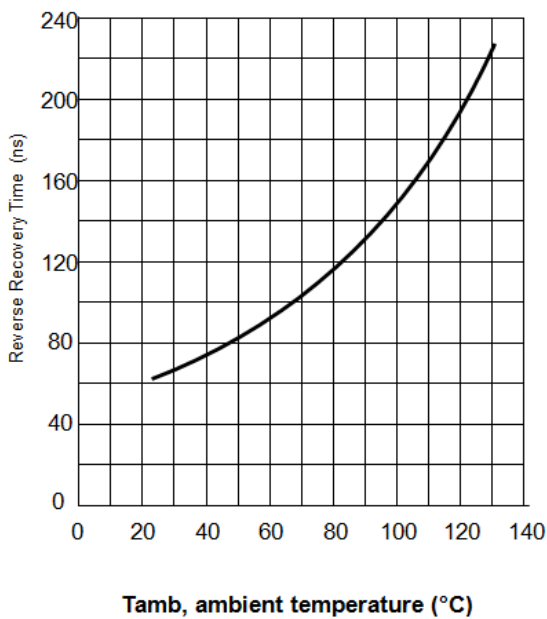
TYPICAL FORWARD CHARACTERISTIC



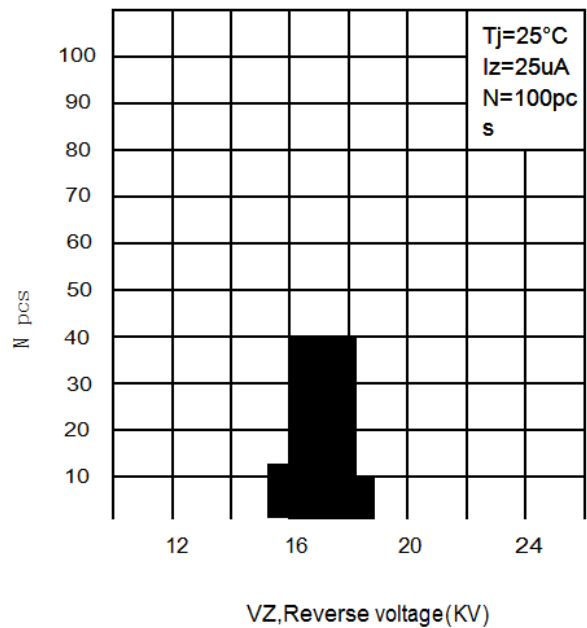
REVERSE CHARACTERISTIC [VR-IR]



REVERSE RECOVERY TIME CHARACTERISTIC [Ta-Trr]



REVERSE VOLTAGE CHARACTERISTIC DISTRIBUTION



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Maximum Ratings & Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbols	2CL73A	Unit
Repetitive Peak Reverse Voltage	VRRM	12	KV
Average Forward Current	IF(AV)	5 (50HZ half-sine wave, Resistance load Ta=25°C)	mA
Non-Repetitive Forward Surge Current	IFSM	0,5 (50HZ half-sine wave, 1/2 cycle, Ta = 25°C)	A
Ambient Temperature	Tamb	-40 --+100	°C
Maximum Junction Temperature	T(vJ)	120	°C
Storage Temperature	Tstg	-40 --+120	°C

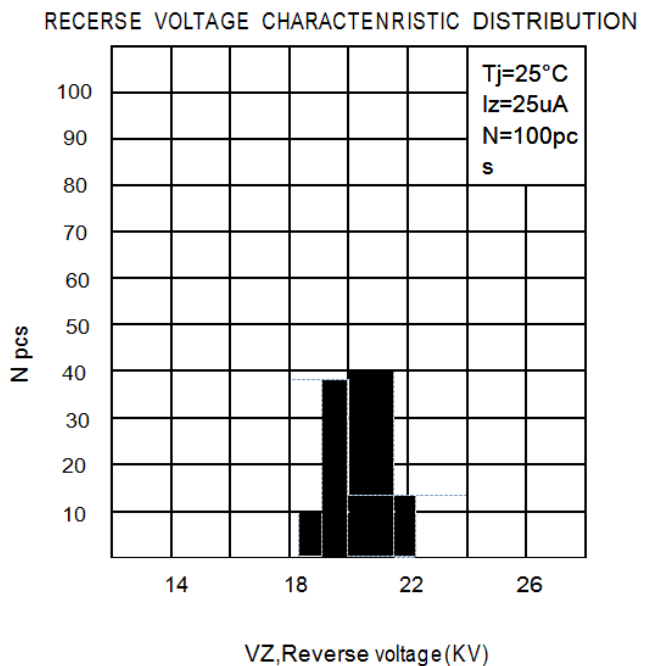
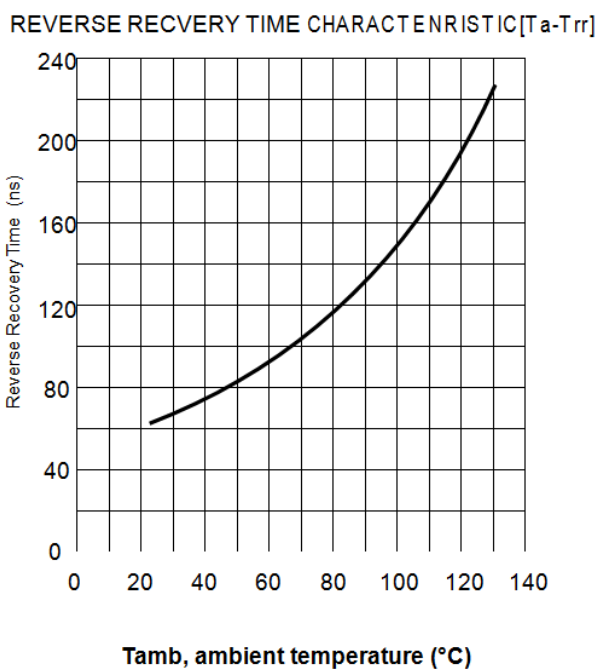
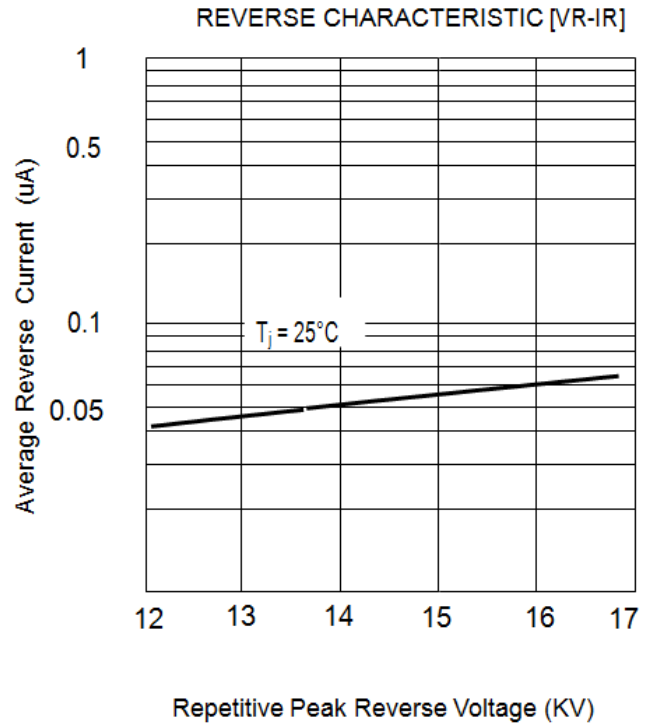
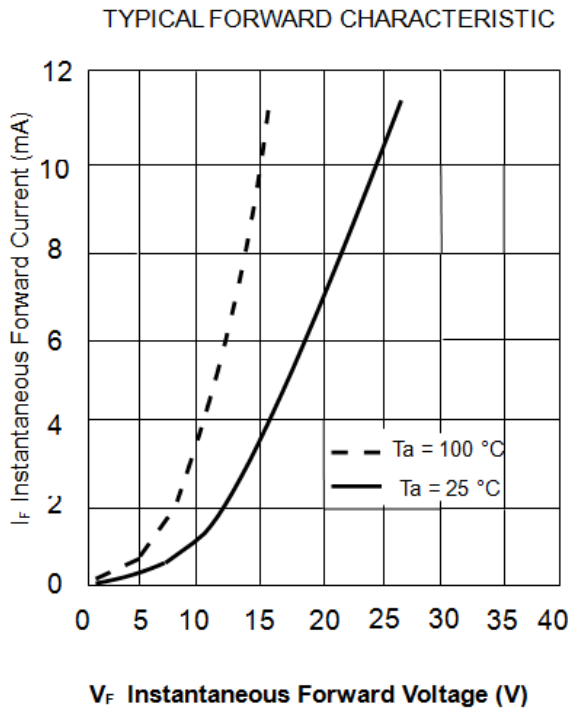
Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified

	Symbols	2CL73A	Unit
Forward Voltage Drop IF =10mA	VF	37.5	V
VR=VRRM Normal Temperature Reverse Current	IRM1	2	µA
TA=100°C VR=VRRM High Temperature Reverse Current	IRM2	5	µA
IF =2mA, I _{rp} =4Ma 1mA recovery Reverse Recovery Time	trr	100	nS

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Characteristics(Typical)

2CL73A

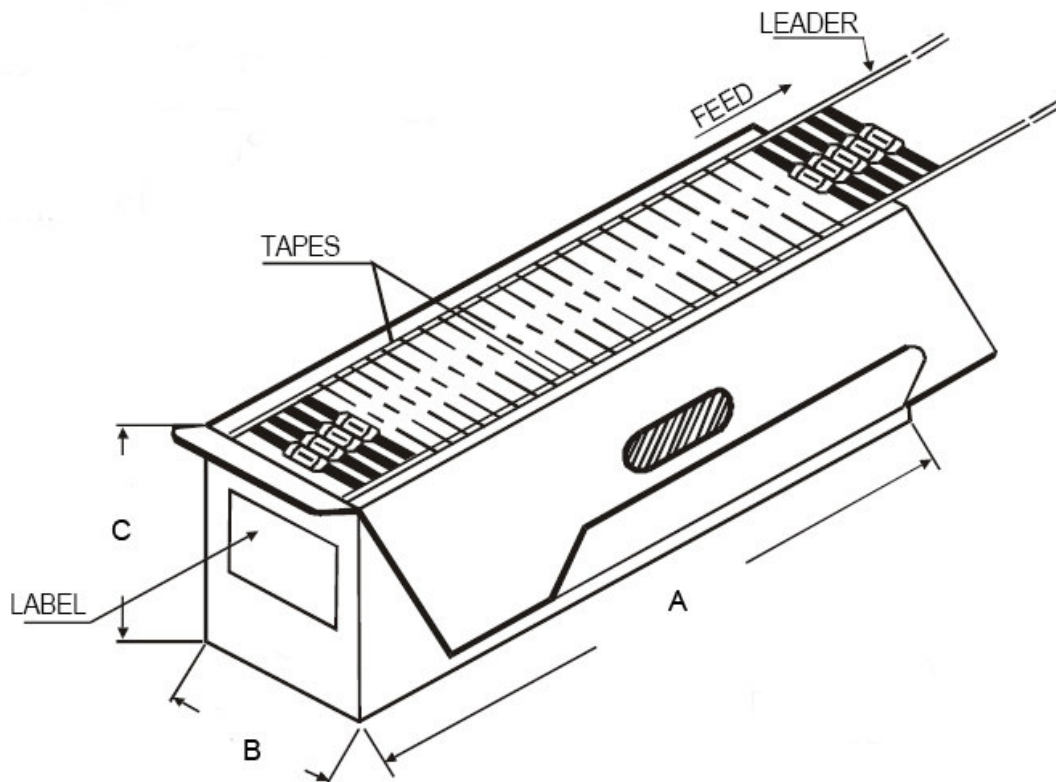


2CL

High Voltage Rectifier

This axial-lead component's packaging requirements use in automatic testing and assembly equipment. And this standard practices for lead-tape packaging of axial-lead components meets the requirements of EIA Standard RS-296-D "Lead-taping of Components on Axial Lead Configuration for Automatic Insertion".

Tape & Ammo Outline



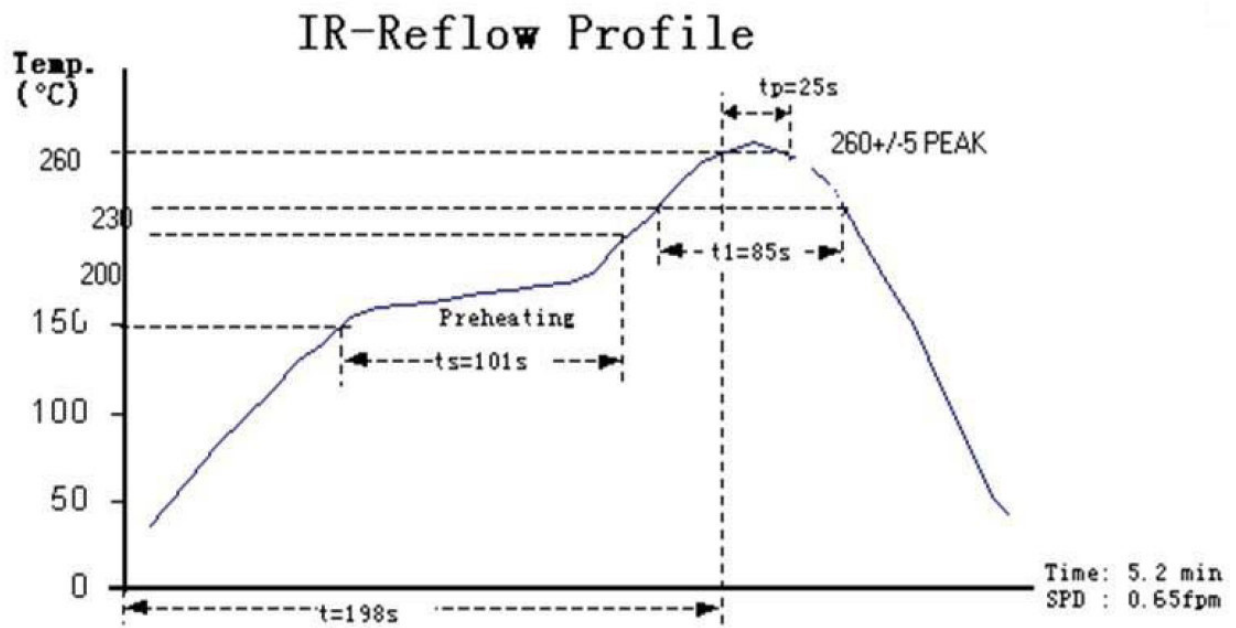
Packaging	Available Product Outlines	Dimension "A"	Dimension "B"	Dimension "C"	Quantity Box
52mm Horizontal Ammo Pack	DO-27	255mm	73mm	77mm	5K

Stock period

The performance of these products, including the solderability, is guaranteed for 12 month, provided that they remain packed as they were when delivered and stored at a temperature of 0-35°C and a relative humidity 35-75%RH

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Lead Free Reflow Soldering Profile



2CL

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