

# 2CL70 THRU 2CL71

## Fast Recovery High Voltage Diodes



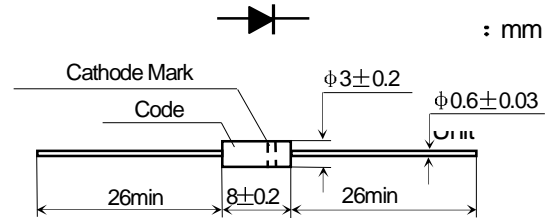
### ■ Features

- Supersmall size
- High reliability
- High speed switching

### ■ Applications

- Rectification for high voltage power supply of color T.V.
- Rectification for high voltage power supply of CRT display.
- Rectification for high voltage power supply of V.T.R camera.
- Others

### ■ Outline Dimensions and Mark



Type	Code	Cathode Mark
2CL70	T-70	⤴
2CL71	T-71	⤴

### ■ Limiting Values (Absolute Maximum Rating)

Item	Symbol	Unit	2CL70	2CL71
Repetitive Peak Reverse Voltage	$V_{RRM}$	kV	6	8
Non-Repetitive Peak Reverse Voltage	$V_{RSM}$	kV	8	10
Average Forward Current	$I_{F(AV)}$	mA	5	(50Hz Half-sine wave, Resistance load, $T_a=25^\circ\text{C}$ )
Surge(Non-repetitive)Forward Current	$I_{FSM}$	A	0.5	(50Hz Half-sine wave, 1cycle, $T_a=25^\circ\text{C}$ )
Operating Ambient Temperature	$T_a$	$^\circ\text{C}$	-40 ~ +100	
Storage Temperature	$T_{stg}$	$^\circ\text{C}$	-40 ~ +120	
Virtual Junction Temperature	$T_{(V)}$	$^\circ\text{C}$	120	

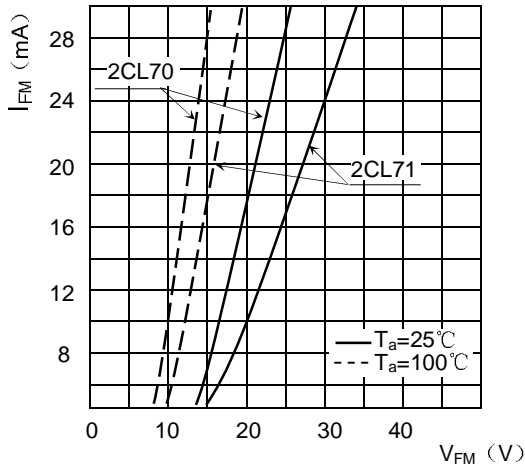
### ■ Electrical Characteristics ( $T_a=25^\circ\text{C}$ Unless otherwise specified)

Item	Symbol	Unit	Test Condition	Max	
				2CL70	2CL71
Peak Forward Voltage	$V_{FM}$	V	$I_{FM}=10\text{mA}$	24	30
Peak Reverse Current	$I_{RRM1}$	$\mu\text{A}$	$V_{RM}=V_{RRM}$	$T_a=25^\circ\text{C}$	2
	$I_{RRM2}$			$T_a=100^\circ\text{C}$	5
Reverse Recovery Time	$t_{rr}$	$\mu\text{s}$	$I_F=2\text{mA}$ $I_{RM}=4\text{mA}$	0.08	

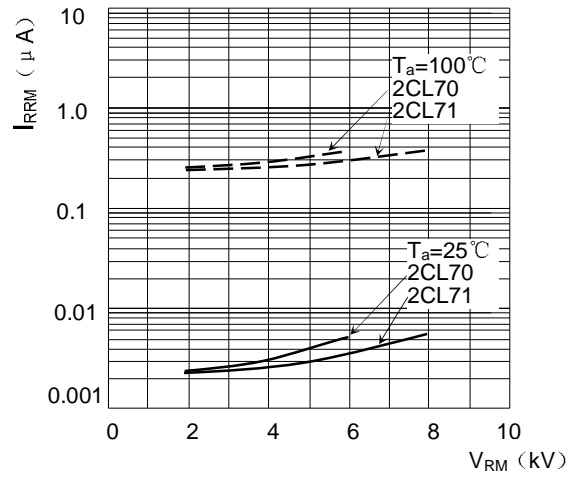
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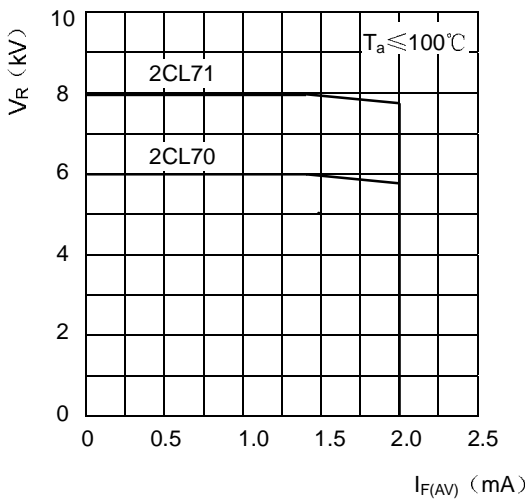
### ■ Characteristics(Typical)



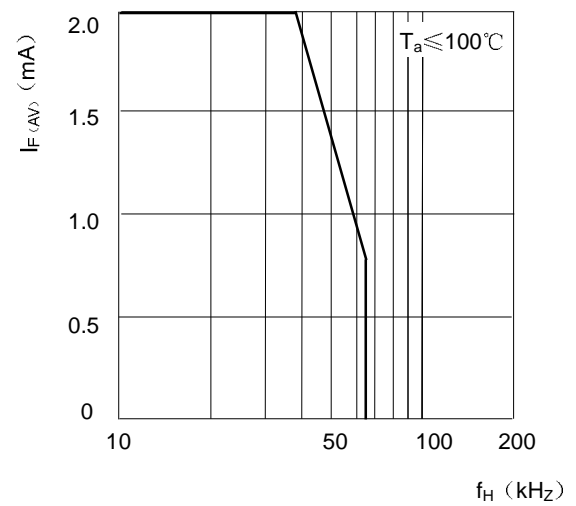
Forward Characteristics



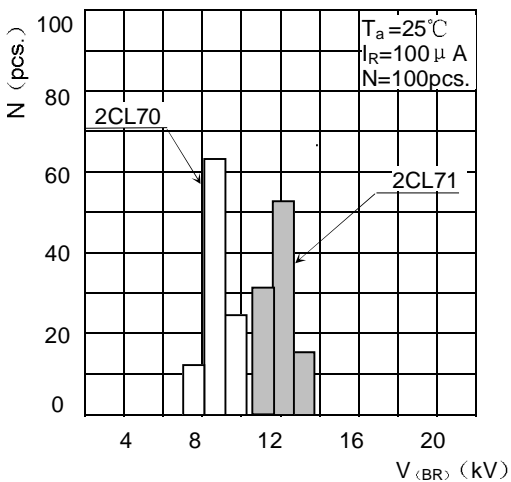
Reverse Characteristics



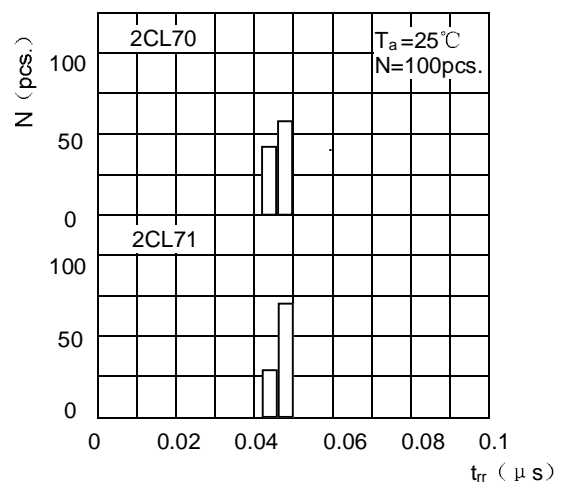
$V_R - I_{F(AV)}$  Curve



$I_{F(AV)} - f_H$  Curve



Breakdown Voltage Distribution



Reverse Recovery Time Distribution