

### Fast recovery high voltage diodes



#### Primary characteristics

Type	2CL70A	2CL71A
$I_{F(AV)}$	10mA	
$V_{RRM}$	6kV	8kV
$I_{FSM}$	0.5A	
$I_{RM}$	2 $\mu$ A	
$V_{FM}$	24V	30V
$T_J \text{ max.}$	120°C	

#### Features

- Supersmall size
- High reliability
- High speed switching

#### Applications

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

#### Mechanical data

- **Case:** Molded Plastic Body
- Epoxy meets UL 94V-0 flammability rating
- **Terminals:** Pure tin plated leads, solderable per J-STD-002 and JESD22-B102, E3 suffix for consumer grade, meet JESD201 class 1A whisker test.
- **Polarity:** Color band denotes cathode end

#### Maximum rating (Ta=25°C unless otherwise noted)

Parameter	Symbol	2CL70A	2CL71A	Unit
Repetitive peak reverse voltage	$V_{RRM}$	6	8	kV
Non-Repetitive peak reverse voltage	$V_{RSM}$	8	10	kV
Average forward current 60Hz half-sine wave, Resistance load, Ta=25°C	$I_{F(AV)}$	10		mA
Surge(Non-repetitive) forward current 60Hz half-sine wave, 1cycle, Ta=25°C	$I_{FSM}$	0.5		A
Peak forward voltage I <sub>FM</sub> =10mA	$V_{FM}$	24	30	V
Peak reverse current V <sub>RM</sub> =V <sub>RRM</sub>	$I_{RRM}$	T <sub>a</sub> =25°C		$\mu$ A
		T <sub>a</sub> =100°C		
Reverse recovery time I <sub>F</sub> =2mA, I <sub>RM</sub> =4mA	$t_{rr}$	0.08		$\mu$ s
Operating ambient temperature	T <sub>a</sub>	-40 ~ +100		°C
Storage temperature	T <sub>stg</sub>	-40 ~ +120		°C
Virtual junction temperature	T <sub>(vj)</sub>	120		°C

### Typical characteristics

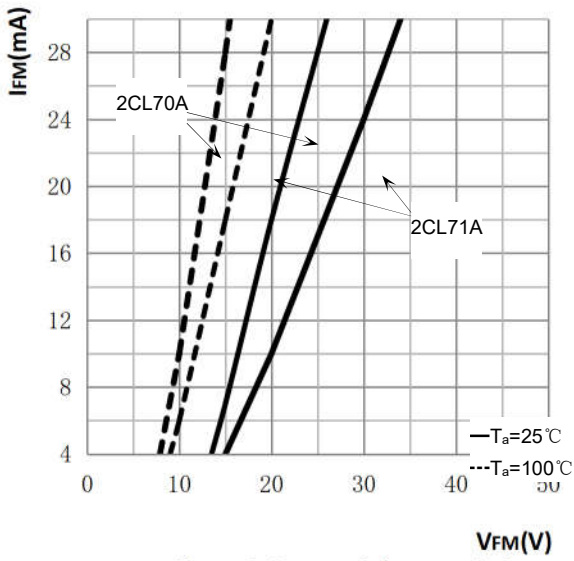


Figure 1. Forward characteristics

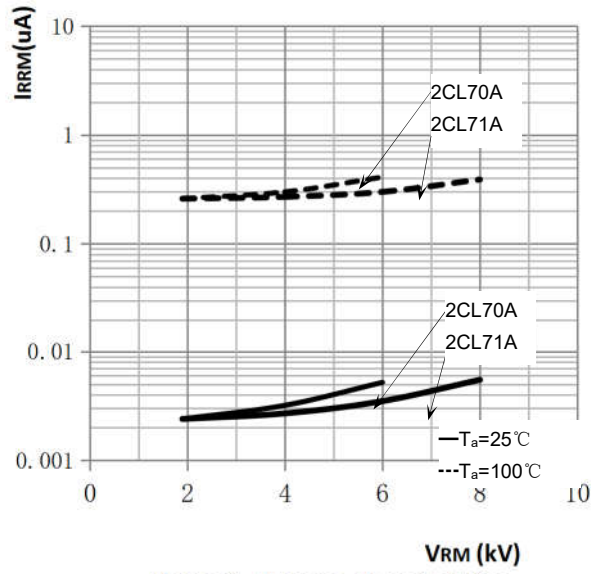


Figure 2. Reverse characteristics

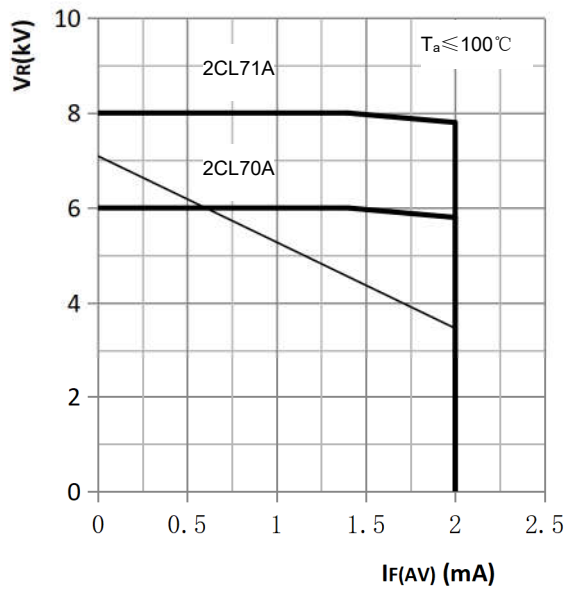


Figure 3.  $V_R$ - $I_{F(AV)}$  Curve

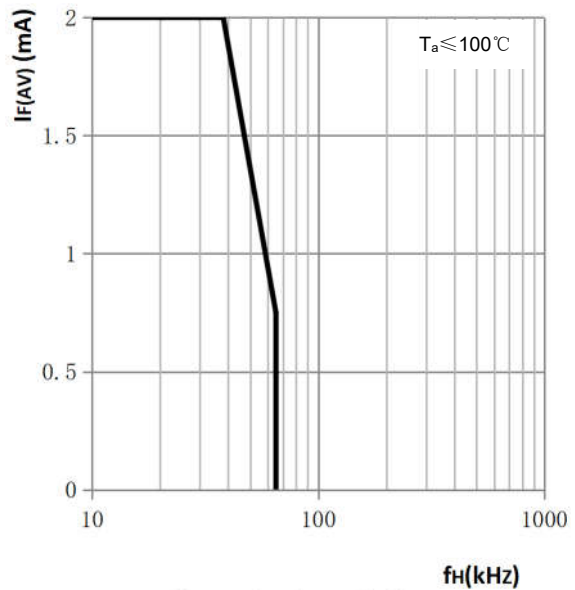
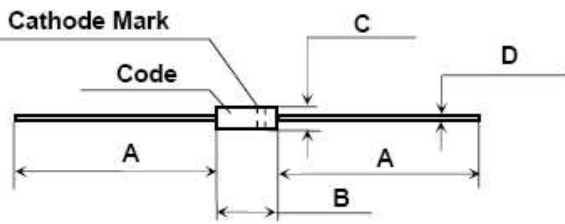


Figure 4.  $I_{F(AV)}$ - $f_H$  Curve

### Package outline dimensions



Dim.	Inches		Millimeters	
	Min.	Max.	Min.	Max.
A	0.984		25	
B	0.307	0.323	6.3	6.7
C	0.110	0.126	2.4	2.6
D	0.022	0.025	0.57	0.63