

Fast Recovery High Voltage Diodes

Reverse Voltage – 10KV-12KV

Forward Current – 5mA

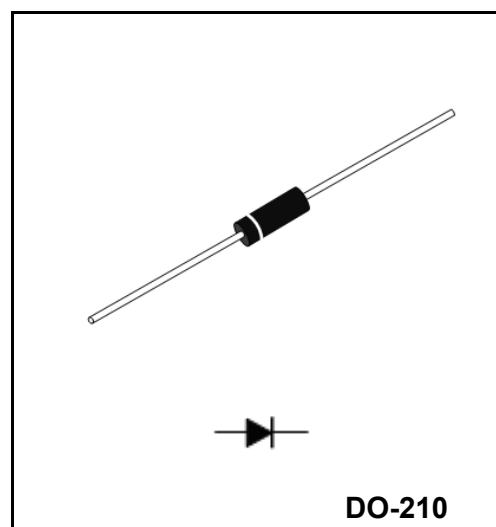
FEATURES

- ◆ Supersmall size
- ◆ High reliability
- ◆ High speed switching



MECHANICAL DATA

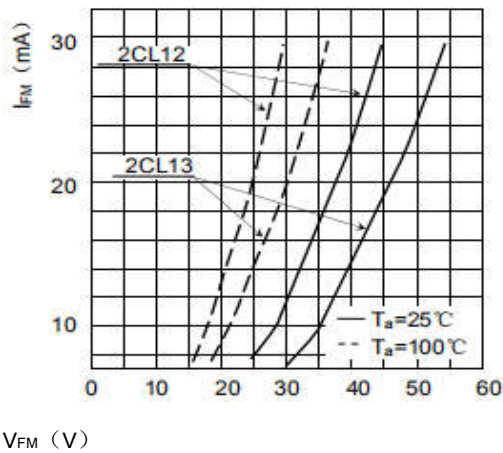
- ◆ Case: Molded Plastic Body
- ◆ Epoxy meets UL 94V-0 flammability rating
- ◆ Terminals: Pure tin plated leads, solderable per J-STD-002 and JESD22-B102, E3 suffix for consumer grade, meet JESD201 class 1A whisker test.
- ◆ Polarity: Color band denotes cathode end



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

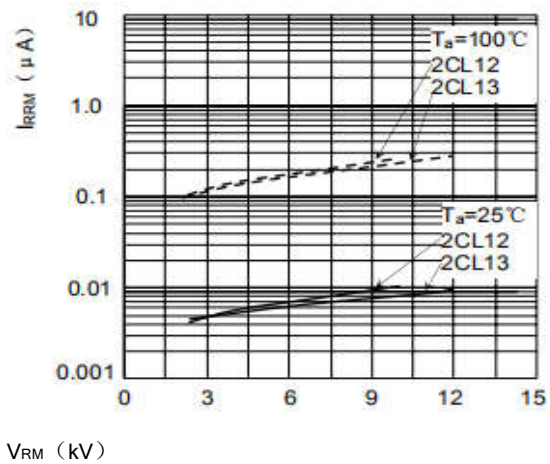
Parameter		Symbol	2CL12	2CL13	Unit
Repetitive peak reverse voltage		V_{RRM}	10	12	KV
Non-Repetitive peak reverse voltage		V_{RSM}	12	15	KV
Average forward current	60Hz half-sine wave, Resistance load, Ta=25°C	$I_{F(AV)}$	5		mA
Surge(Non-repetitive)forward current	60Hz half-sine wave, 1 cycle, Ta=25°C	I_{FSM}	0.5		A
Peak forward voltage	$I_{FM}=10mA$	V_{FM}	35	42	V
Peak reverse current $V_{RM}=V_{RRM}$	Ta=25°C	I_{RRM}	2 5		μA
	Ta=100°C				
Reverse recovery time	$I_F=2mA, I_{RM}=4mA$	T_{rr}	0.045		μS
Operating ambient temperature		Ta	-40 ~ +100		°C
Storage Temperature Range		Tstg	-40 ~ +120		°C
Virtual junction temperature		T(vj)	120		°C

Typical characteristics



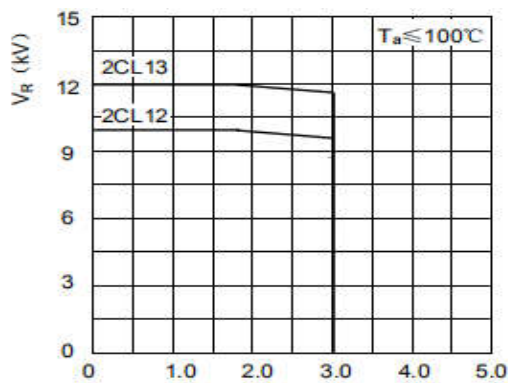
V_{FM} (V)

Forward Characteristics



V_{RM} (kV)

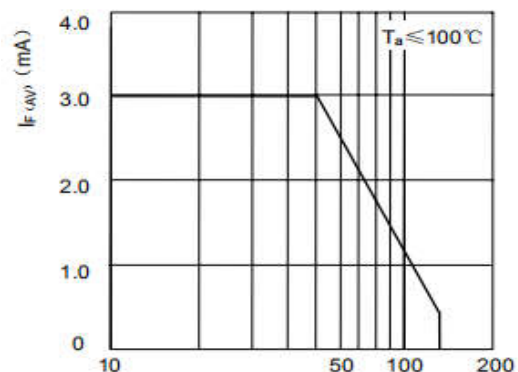
Reverse Characteristics



$I_{F(AV)}$ (mA)

$V_R - I_{F(AV)}$

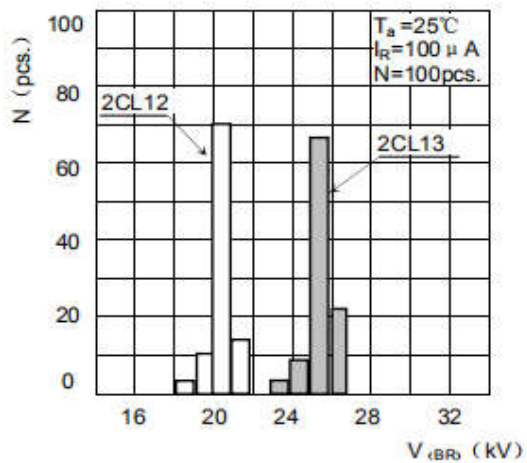
$V_R - I_{F(AV)}$ Curve



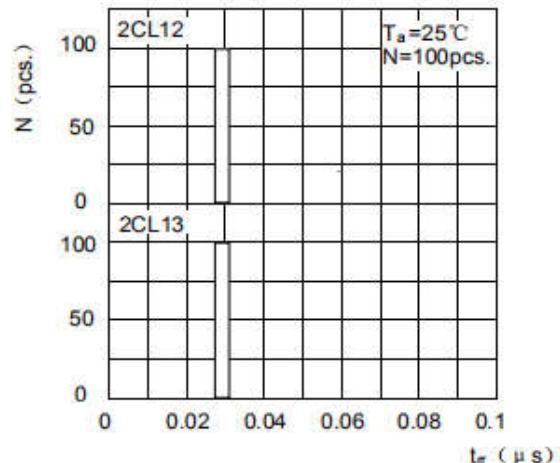
f_H (kHz)

$I_{F(AV)} - f_H$

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

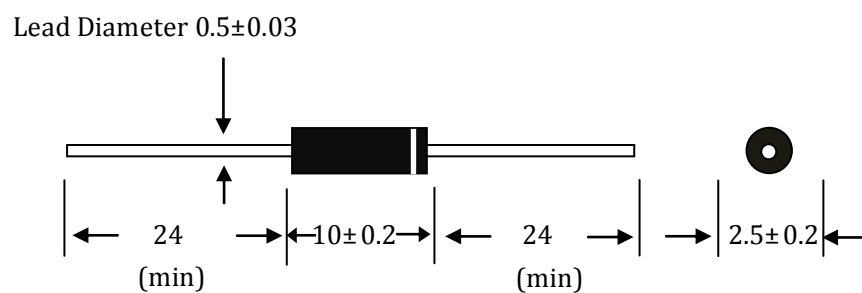


Breakdown Voltage Distribution



Reverse Recovery Time Distribution

Package outline dimensions



Summary of Packing Options

Package	Packing Description	Packing Quantity	Industry Standard
DO-210	BOX	5000	EIA-481-1