

Fast recovery high voltage diodes

Reverse Voltage –10KV to 12KV

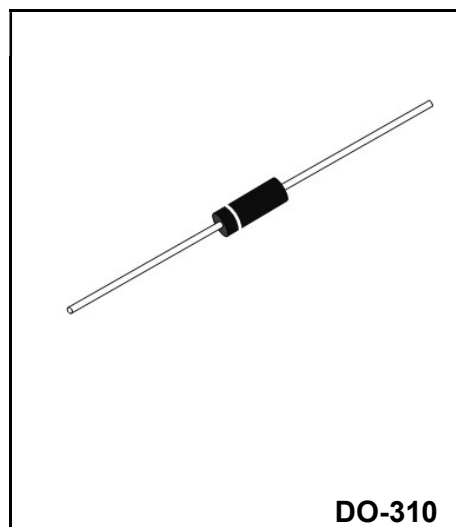
Forward Current –5mA

FEATURES

- ◆ Supersmall size
- ◆ High reliability
- ◆ High speed switching
- ◆ Epoxy meets UL94V-0 flammability rating

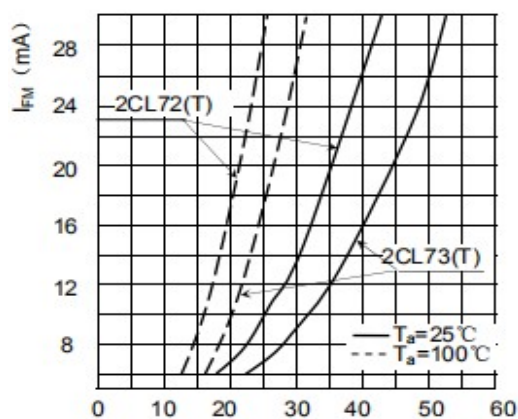
MECHANICAL DATA

- ◆ Case: Molded Plastic Body
- ◆ Terminals: Pure tin plated leads, solderable per J-STD-002 and JESD22-B102, E3 suffix for consumer grade, meet JESD201 class 1A whisker test.



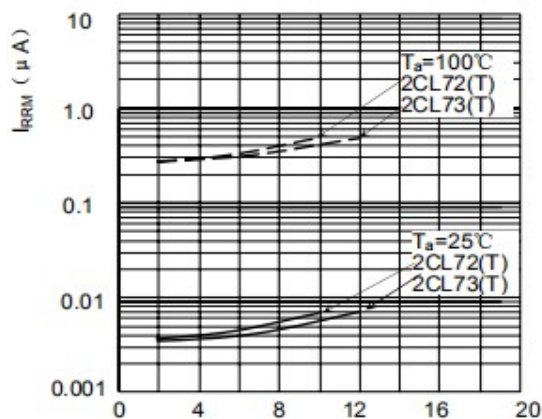
Parameter		Symbols	2CL72T	2CL73T	Units
Repetitive peak reverse voltage		V_{RRM}	10	12	KV
Non-Repetitive peak reverse voltage		V_{RMS}	12	15	KV
Average forward current	60Hz half-sine wave, Resistance load, $T_a=25^{\circ}\text{C}$	$I_{F(AV)}$	5		mA
Surge(Non-repetitive)forward current	60Hz half-sine wave, 1 cycle, $T_a=25^{\circ}\text{C}$	I_{FSM}	0.5		A
Peak forward voltage	$I_{FM}=10\text{mA}$	V_{FM}	42	48	V
Peak reverse current $V_{RM}=V_{RRM}$	$T_a=25^{\circ}\text{C}$	I_{RRM}	2 5		μA
	$T_a=100^{\circ}\text{C}$				
Reverse recovery time	$I_F=2\text{mA}, I_{RM}=4\text{mA}$	T_{rr}	0.08		μS
Operating ambient temperature		T_a	$-40 \sim +100$		$^{\circ}\text{C}$
Storage Temperature Range		T_{stg}	$-40 \sim +120$		$^{\circ}\text{C}$
Virtual junction temperature		$T_{(vj)}$	120		$^{\circ}\text{C}$

Typical characteristics



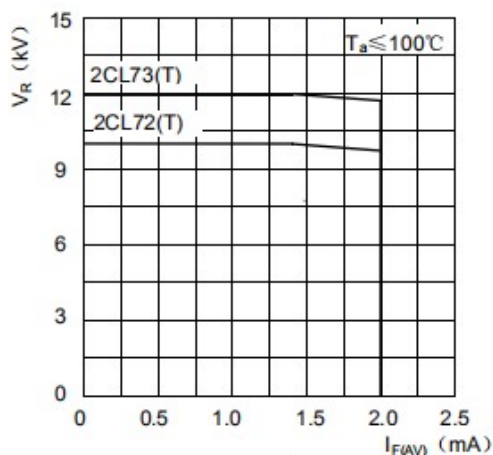
V_{FM} (V)

Forward Characteristics



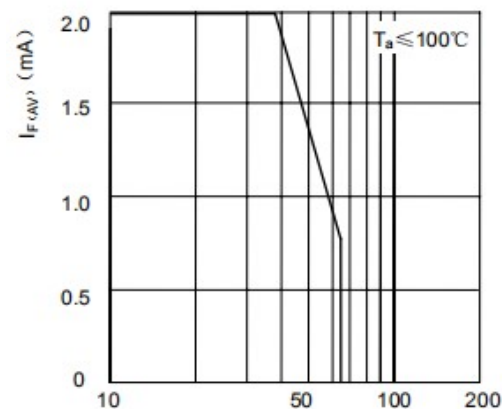
V_{RM} (kV)

Reverse Characteristics



$V_R - I_F$ (AV)

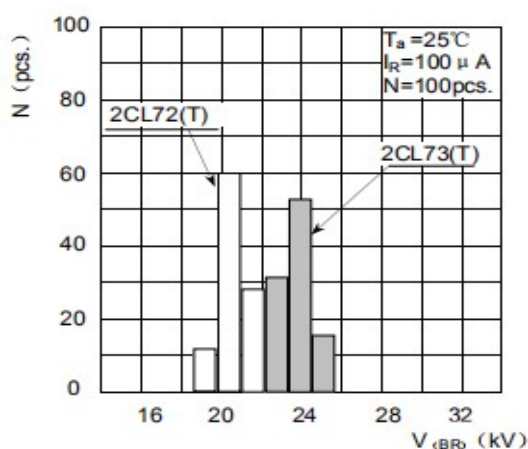
$V_R - I_F$ (AV) Curve



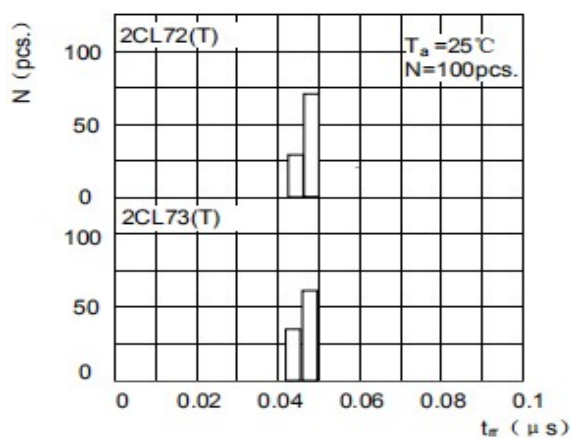
f_H (kHz)

I_F (AV) — f_H

I_F (AV) — f_H Curve

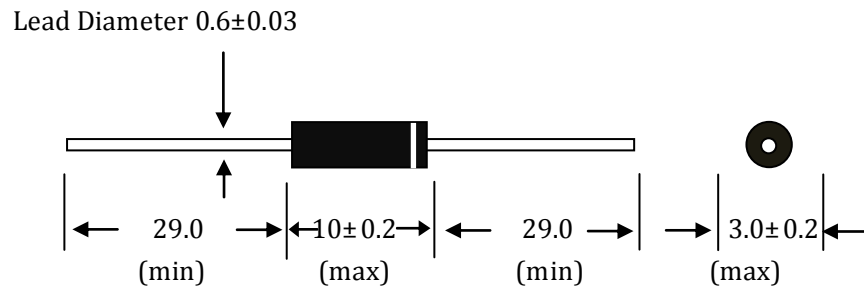


Breakdown voltage Distribution



Reverse Recovery Time Distribution

Package Outline DO-310



Summary of Packing Options

Package	Packing Description	Packing Quantity	Industry Standard
DO-310	BOX	5000	EIA-481-1