

Fast recovery high voltage diodes

Reverse Voltage –6KVto 8KV

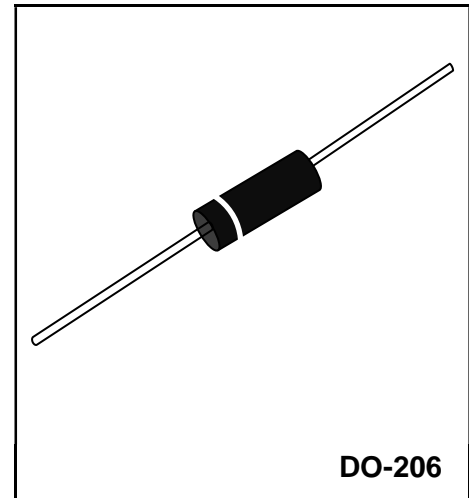
Forward Current –5mA

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	2CL70A-TB	2CL71A	Units
Repetitive peak reverse voltage		V_{RRM}	6	8	KV
Non-Repetitive peak reverse voltage		V_{RMS}	8	10	KV
Average forward current	60Hz half-sine wave, Resistance load, $T_a=25^{\circ}C$	$I_{F(AV)}$	5		mA
Surge(Non-repetitive)forward current	60Hz half-sine wave, 1 cycle, $T_a=25^{\circ}C$	I_{FSM}	0.5		A
Peak forward voltage	$I_{FM}=10mA$	V_{FM}	24	30	V
Peak reverse current $V_{RM}=V_{RRM}$	$T_a=25^{\circ}C$	I_{RRM}	2		μA
	$T_a=100^{\circ}C$		5		
Reverse recovery time	$I_F=2mA, I_{RM}=4mA$	T_{rr}	0.08		μS
Operating ambient temperature		T_a	-40 ~ +100		$^{\circ}C$
Storage Temperature Range		T_{stg}	-40 ~ +120		$^{\circ}C$
Virtual junction temperature		$T_{(vj)}$	120		$^{\circ}C$

Typical characteristics

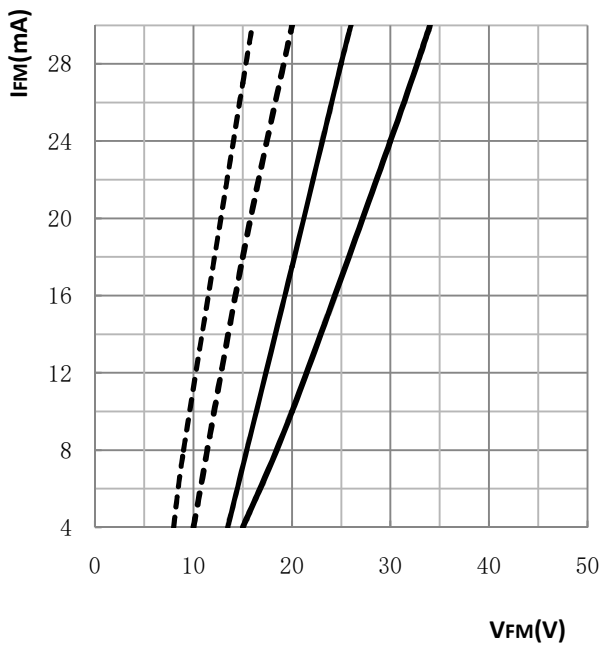


Figure 1. Forward characteristics

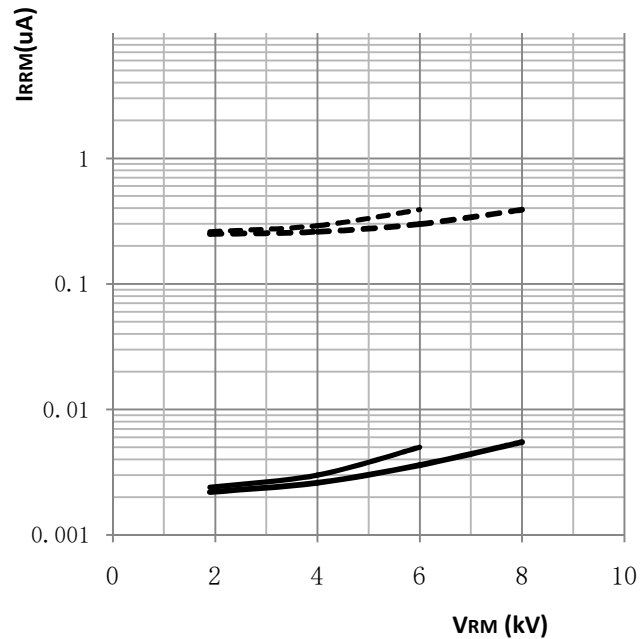


Figure 2. Reverse characteristics

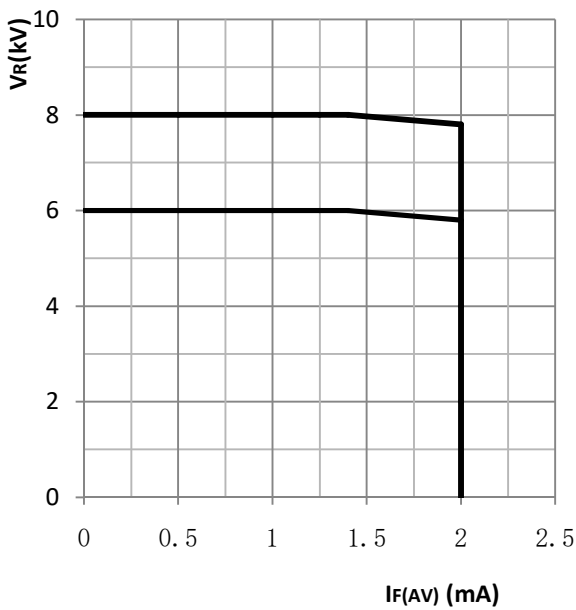


Figure 3. V_R - $I_{F(AV)}$ Curve

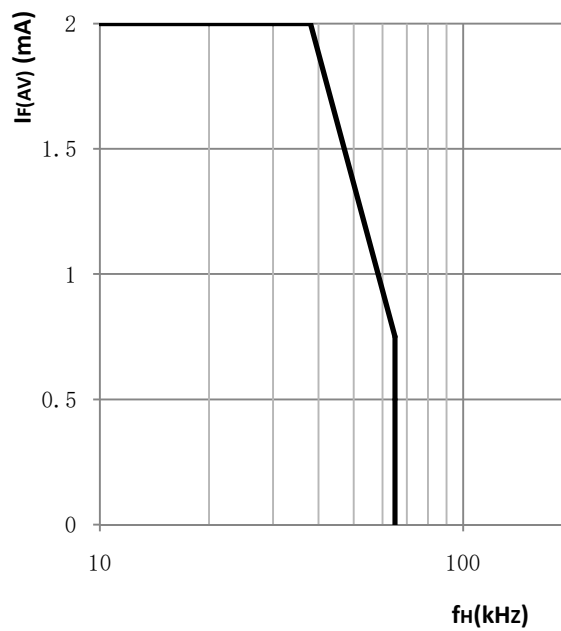
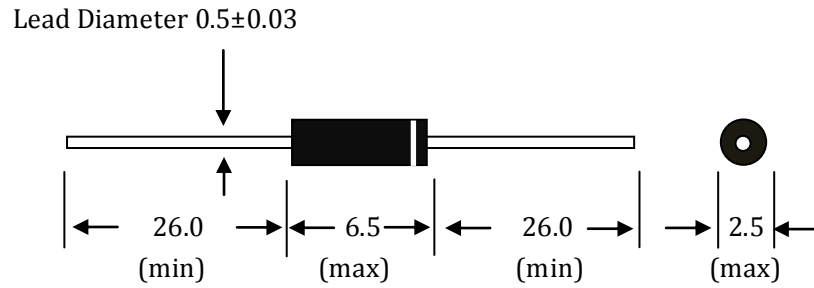


Figure 4. $I_{F(AV)}$ - f_H Curve

Package Outline DO-206



Summary of Packing Options

Package	Packing Description	Packing Quantity	Industry Standard
DO-206	BOX	5000	EIA-481-1