

Ultra-Fast recovery high voltage diodes

Reverse Voltage – 8kV

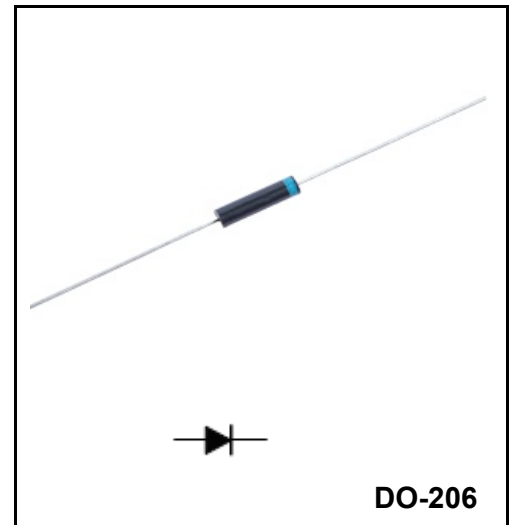
Forward Current –10mA

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-002and JESD22-B102, E3 suffix for consumer grade, meet JESD201class 1A whisker test.
- ◆Polarity: Color band denotes cathode end

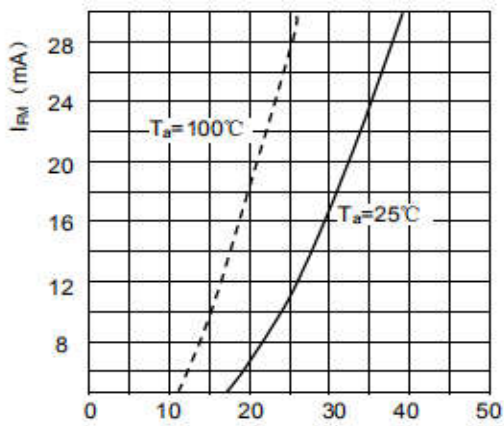


DO-206

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

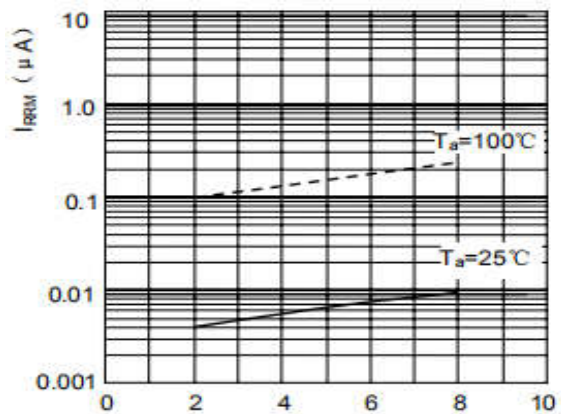
Parameter		Symbol	2CL01	Unit
Repetitive peak reverse voltage		V_{RRM}	8	KV
Non-Repetitive peak reverse voltage		V_{RSM}	10	KV
Average forward current	60Hz half-sine wave, Resistance load, Ta=25°C	$I_{F(AV)}$	10	mA
Surge(Non-repetitive)forward current	60Hz half-sine wave, 1cycle, Ta=25°C	I_{FSM}	0.5	A
Peak forward voltage	$I_{FM}=10mA$	V_{FM}	28	V
Peak reverse current $V_{RM}=V_{RRM}$	Ta=25°C	I_{RRM}	2	μA
	Ta=100°C		5	
Reverse recovery time	$I_F=2mA, I_{RM}=4mA$	T_{rr}	0.05	uS
Operating ambient temperature		T_a	-40~+125	°C
Storage Temperature Range		T_{stg}	-40~+150	°C
Virtual junction temperature		$T_{(vj)}$	125	°C

Typical characteristics



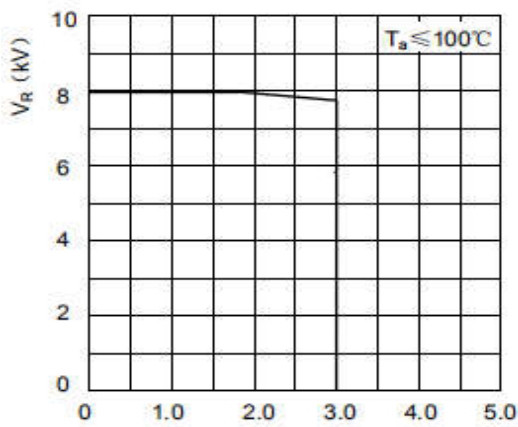
V_{FM} (V)

Forward Characteristics



V_{RM} (kV)

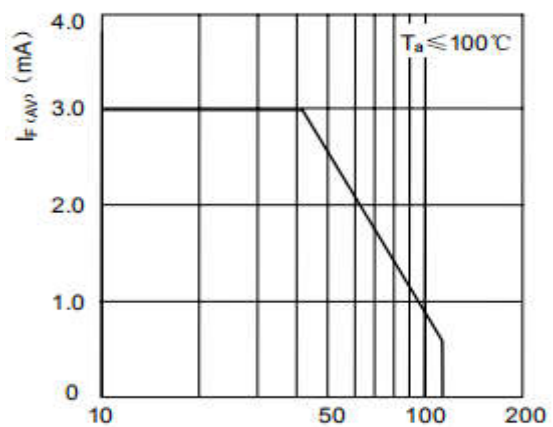
Reverse Characteristics



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

$V_R - I_{F(AV)}$

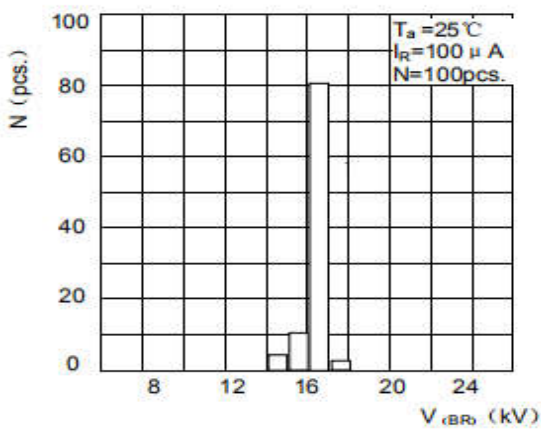
$V_R - I_{F(AV)}$ Curve



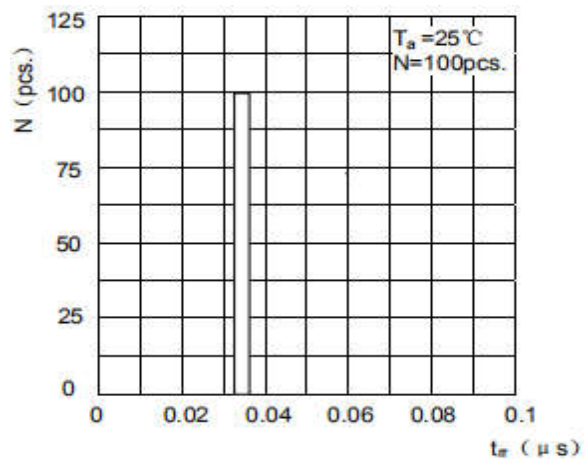
f_H (kHz)

$I_{F(AV)} - f_H$

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



Breakdown Voltage Distribution



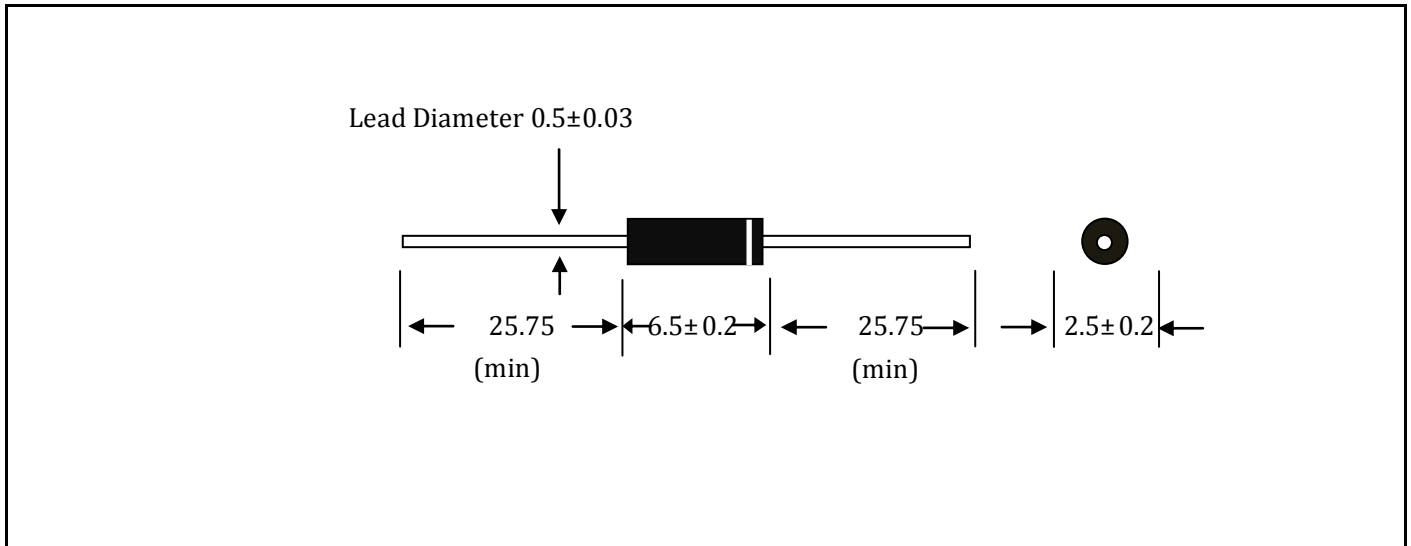
Reverse Recovery Time Distribution

Ordering information

Package	Packing Description	Packing Quantity
DO-206	ammo pack	5000PCS/Inner Box 50000PCS/Carton

Package Dimensions(Millimeter(mm))

DO-206



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