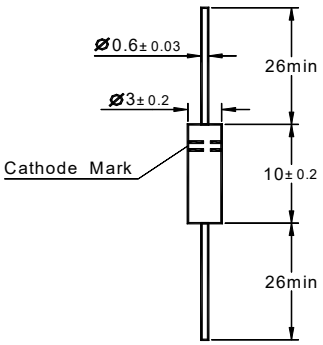
HV10, HV12, HV14

FAST RECOVERY HIGH VOLTAGE DIODES

Features

- Supersmall size
- High reliability
- High speed switching



Dimensions in mm

Applications

- Rectification for high voltage power supply of color T.V.
- Rectification for high voltage power supply of CRT display
- Others

Type	Cathode Mark
HV10	▬◆◆◆
HV12	◆◆◆
HV14	●●●

Absolute Maximum Ratings and Characteristics (T_a = 25 °C unless otherwise specified.)

Parameter	Symbols	HV10	HV12	HV14	Units
Repetitive Peak Reverse Voltage	V_{RRM}	10	12	14	KV
Non-Repetitive Peak Reverse Voltage	V_{RSM}	12	15	17	KV
Average Forward Current (50 Hz Half-sine Wave, Resistance load, T_a = 25 °C)	$I_{F(AV)}$	5			mA
Surge(Non-repetitive) Forward Current (50 Hz Half-sine Wave, 1 cycle, T_a = 25 °C)	I_{FSM}	0.5			A
Peak Forward Voltage at I_F = 10 mA	V_F	36	45	51	V
Peak Reverse Current at $V_{RM} = V_{RRM}$ T_a = 25 °C T_a = 100 °C	I_R	2 5			μA
Reverse Recovery Time at I_F = 2 mA, I_{RM} = 4 mA	t_{rr}	0.08			μS
Operating Ambient Temperature	T_a	-40 ~ +100			°C
Storage Temperature	T_{stg}	-40 ~ +120			°C
Virtual Junction Temperature	$T_{(vj)}$	120			°C

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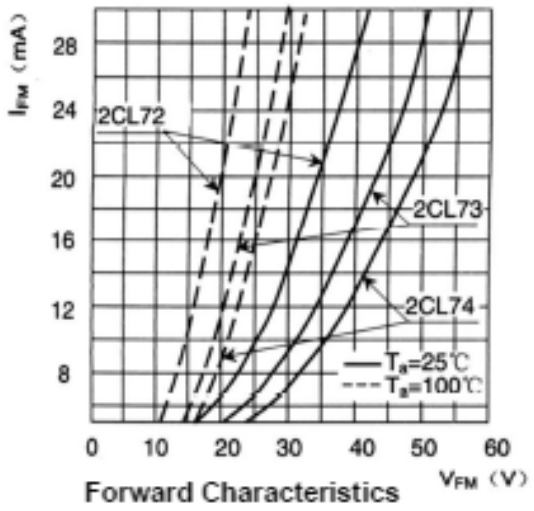
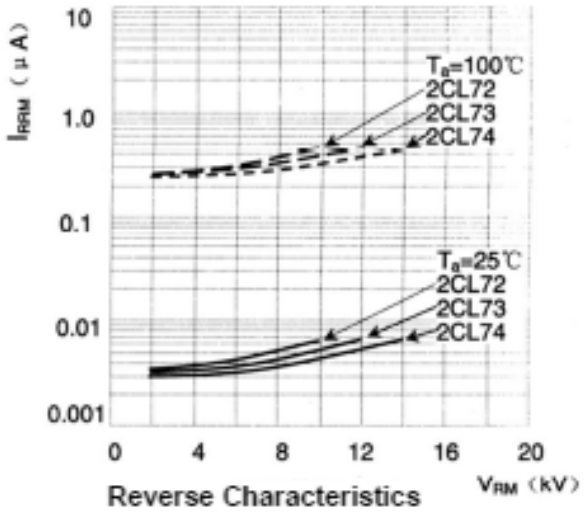
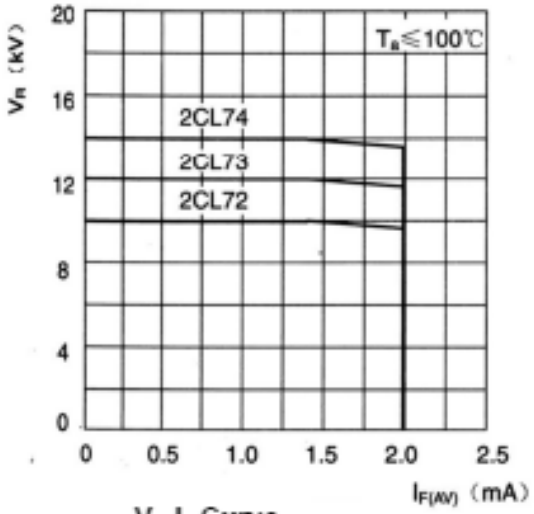


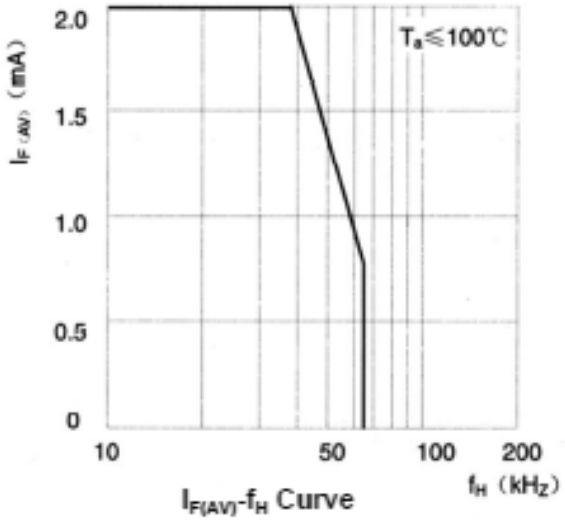
Forward Characteristics



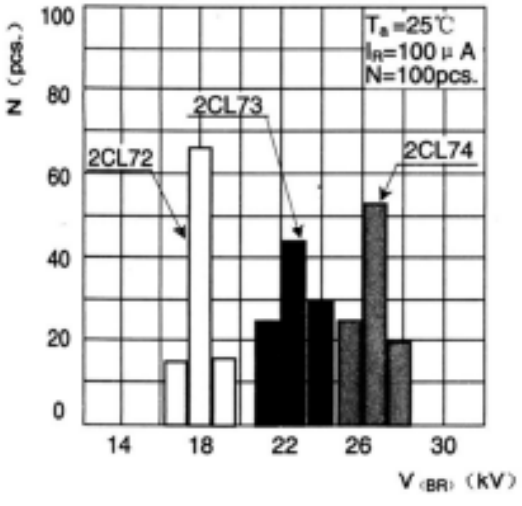
Reverse Characteristics



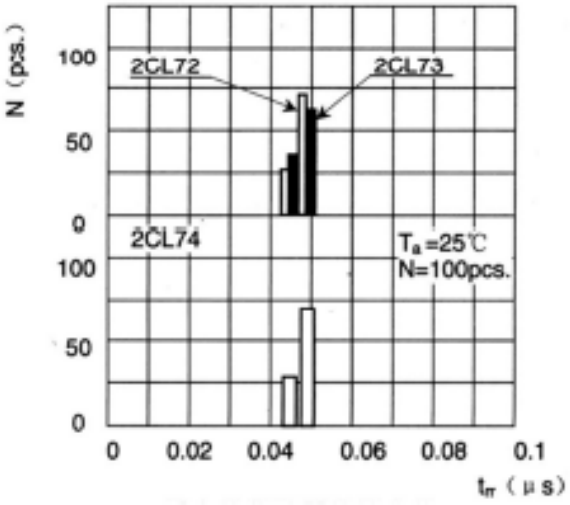
V_R-I_F Curve



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



Breakdown Voltage Distribution



Breakdown Voltage Distribution

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