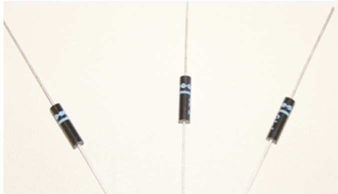
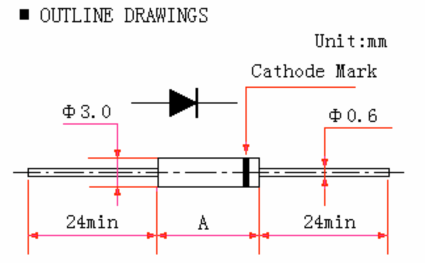
AMERICAN MICROSEMICONDUCTOR

AMS2***X*** series HV diode 6~20KV 5mA 80nS

High Voltage Rectifiers



The AMS high voltage diodes adopt the designing of high reliable multiple mesa structure and silicon tube, molded in small volume and compact packaging surface by epoxy resin.



Type	AMS23	AMS24	AMS25	AMS26	AMS27
Dimension A	8.0 mm		10.0 mm		

■ Features:

- Fast recovery
- Low forward on pressure, low leakage current
- Protection of avalanche breakdown
- Anti-impacting of discharging of CRT high voltage surge current
- Axial lead diode, could weld on tube pin
- Epoxy resin molded and can resist corrosion on its surface

■ Application:

- Television and FBT display
- Cathode ion generator, laser power supply
- Neon lamp power supply, voltage multiplier assembly
- DC high voltage generator assembly

■ Electric Characteristic

MAXIMUM RATED VALUE

Rated Value	**Sign**	**Condition**	**AMS23**	**AMS24**	**AMS25**	**AMS26**	**AMS27**	**Unit**
Peak Reverse Repetitive Voltage	VRRM		8	10	12	14	16	kV
Average Forward Rectifier Current	Io		5.0					mA
Max. Irrepetitive Surge current	IFSM	Ta=25℃，rated load，half cycle single phase，50Hz	0.5					A
Junction Temperature	Tj	half cycle sinewave peak voltage	120					℃
Ambient Humidity	Tc		100					℃
Store Humidity	Tstg		-40 to +120 C					℃

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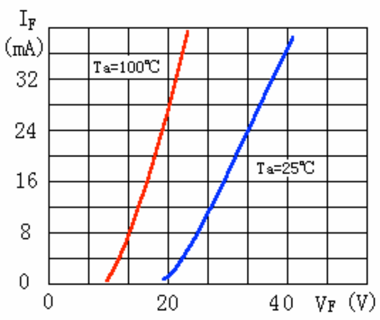
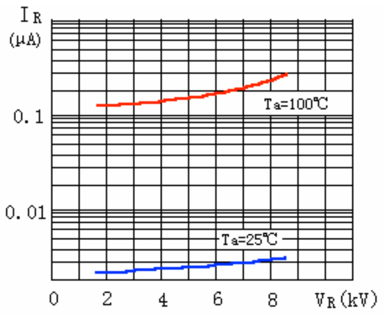
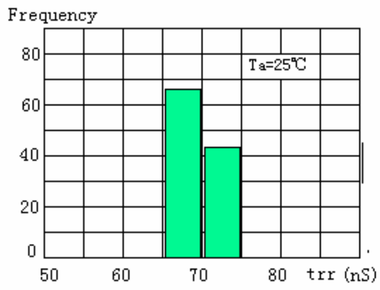
Rated Value	**Sign**	**Condition**	**AMS23**	**AMS24**	**AMS25**	**AMS26**	**AMS27**	**Unit**
Max. Forward Peak Voltage	V	I_F=10mA	26.5	32	37.5	42.0	46.5	V
Max. Reverse Recovery Time	trr	I_F=2mA I_R=4mA	0.1					µS
Max. Reverse Leakage Current	I_{R1}	V_R=V_{RRM}， 25 ℃	2.0					µA
Max. Reverse Leakage Current	I_{R2}	V_R=V_{RRM}， 100 ℃	5.0					µA
Max. Junction Capacitor	Cj		2					pF



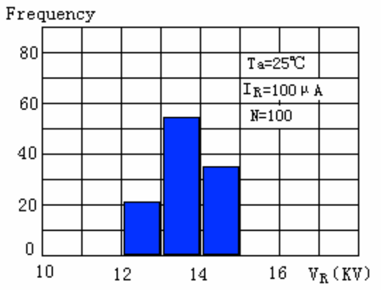
FORWARD CHARACTERISTICS AMS23



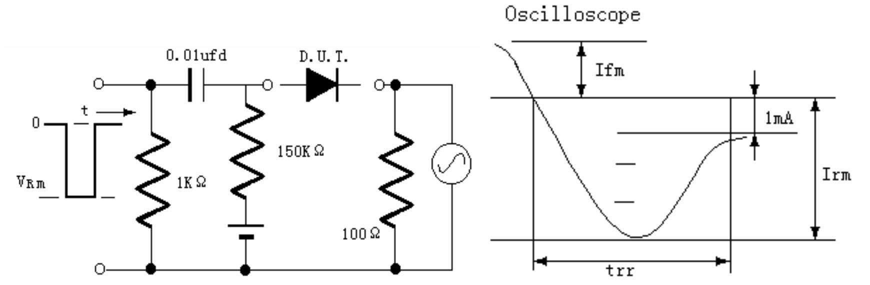
REVERSE CHARACTERISTICS AMS23



REVERSE RECOVERY TIME



AVALNCHE BREAKDOWN VOLTAGE



REVERSE RECOVERY TIME
BASIC TEST CIRCUIT