AMS-FOB 500mA 8.0kV 40nS

Ultra-Fast Recovery High Voltage Silicon Rectifier Diodes

INTRODUCE:

AMS high voltage silicon rectifier diode is made of high quality glass passivated chip and high reliability epoxy resin sealing structure.

FEATURES:

1. High reliability design.
2. High voltage, large current.
3. High frequency, Fast recovery.
4. Conform to RoHS and SGS.

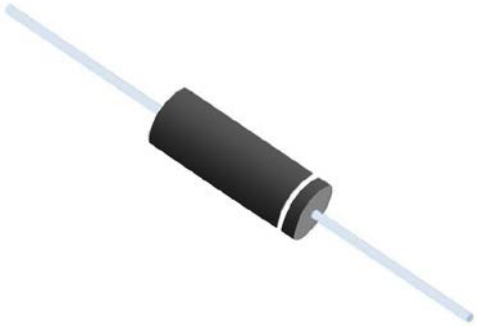
APPLICATIONS:

1. High voltage multiplier circuit
2. High frequency switching power supply
3. General purpose high voltage rectifier.
4. Laser power supply medical equipment

MECHANICAL DATA:

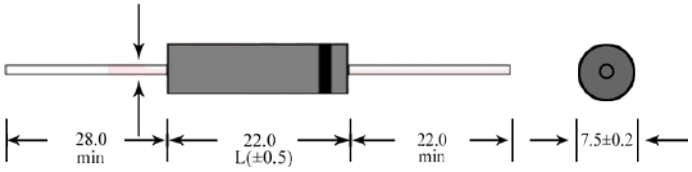
1. Case: epoxy resin molding.
2. Terminal: welding axis.
3. Net weight: 2.55 grams (approx).

SHAPE DISPLAY:



SIZE: (Unit:mm) NAME: DO-722

Lead Diameter 1.2mm ±0.02



Unit:mm

MAXIMUM RATINGS AND CHARACTERISTICS: (Absolute Maximum Ratings)

Items	Symbols	Condition	Data Value	Units
Repetitive Peak Reverse Voltage	V_{RRM}	T_A=25°C	8.0	kV
Non-Repetitive Peak Reverse Voltage	V_{RSM}	T_A=25°C	--	kV
Average Forward Current Maximum	I_{FAVM}	T_A=55°C	500	mA
		T_{OIL}=55°C	--	mA
Non-Repetitive Forward Surge Current	I_{FSM}	T_A=25°C; 50Hz Half-Sine Wave; 8.3mS	20	A
Junction Temperature	T_J		150	°C
Allowable Operation Case Temperature	T_c		-40~+150	°C
Storage Temperature	T_{STG}		-40~+150	°C

ELECTRICAL CHARACTERISTICS: TA=25°C (Unless Otherwise Specified)

Items	Symbols	Condition	Data Value	Units
Maximum Forward Voltage Drop	V_{FM}	at 25°C; at I_{FAVM}	12	V
Maximum Reverse Current	I_{R1}	at 25°C; at V_{RRM}	0.5	uA
	I_{R2}	at 125°C; at V_{RRM}	50	uA
Maximum Reverse Recovery Time	T_{RR}	at 25°C; I_F=0.5A; I_R=I_{FAVM}; I_{RR}=0.25mA	40	nS
Junction Capacitance	C_J	at 25°C; V_R=0V; f=1MHz	7.5	pF

Tel. 1-973-377-9566 Fax. 1-973-377-3078
133 Kings Road
Madison, New Jersey 07940
United States of America
www.americanmicrosemi.com

2016 American Microsemiconductor, Inc.®
Specifications are subject to change without notice
American Microsemiconductor, Inc. reserves right to make changes to the product specifications and data in this document without notice. American Microsemiconductor, Inc. disclaims all and any warranty and liability arising out of use or application of any product. No license, express or implied to any intellectual property rights is granted by this document. Unless otherwise expressly indicated, American Microsemiconductor, Inc. products are not designed, tested or authorized for use in life -saving, medical, aircraft navigation, communication, air traffic control and weapons systems, nor in applications where their failure may result in death, personal injury and/or property damage.

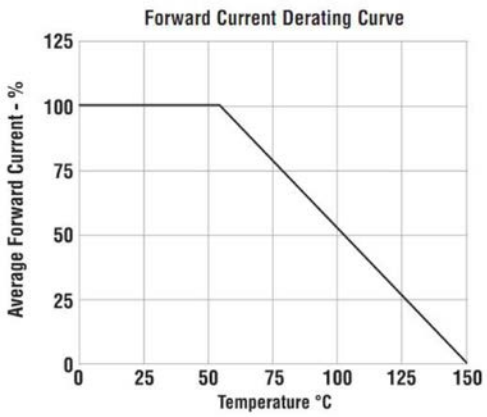
DEKRA Certification Inc.
AS9100C and ISO 9001:2008
Certificate No. 131519.01

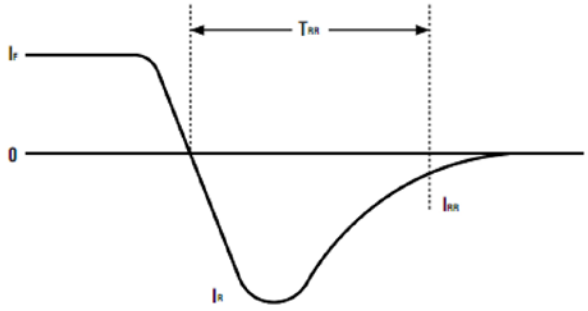
Download from alldatasheet.com

AMS-FOB 500mA 8.0kV 40nS

Ultra-Fast Recovery High Voltage Silicon Rectifier

Fig 1	Fig 2
Forward Current Derating Curve	Reverse Recovery Measurement Waveform

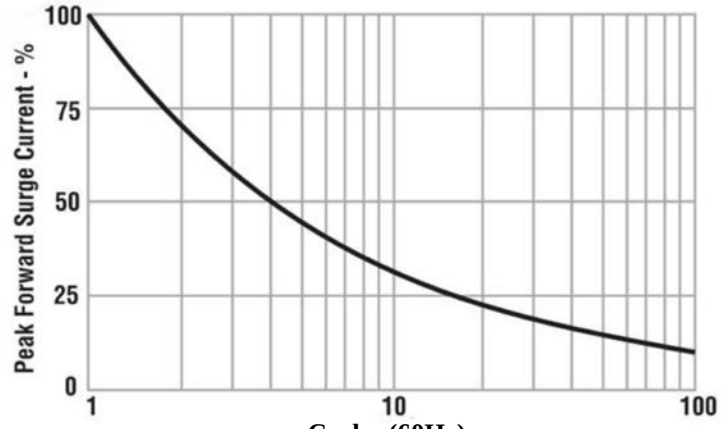




Typical data capture points: $I_F = 0.5I_R$, $I_R, I_{RR} = 0.25I_R$
I_R is typically the rated average forward current maximum (I_{FAVM}) of the D.U.T

Fig 3

Non-Repetitive Surge Current



Marking	Type	Code	Cathode Mark

Tel. 1-973-377-9566 Fax. 1-973-377-3078
133 Kings Road
Madison, New Jersey 07940
United States of America
www.americanmicrosemi.com

2016 American Microsemiconductor, Inc.®
Specifications are subject to change without notice
American Microsemiconductor, Inc. reserves right to make changes to the product specifications and data in this document without notice. American Microsemiconductor, Inc. disclaims all and any warranty and liability arising out of use or application of any product. No license, express or implied to any intellectual property rights is granted by this document. Unless otherwise expressly indicated, American Microsemiconductor, Inc. products are not designed, tested or authorized for use in life -saving, medical, aircraft navigation, communication, air traffic control and weapons systems, nor in applications where their failure may result in death, personal injury and/or property damage.

DEKRA Certification Inc.
AS9100C and ISO 9001:2008
Certificate No. 131519.01

Download from alldatasheet.com