

High Voltage Silicon Diodes

Reverse Voltage –15KV

Forward Current –200mA

FEATURES

◆High reliability

APPLICATIONS

◆Rectification for high voltage power supply of magnetron in Micro wave oven and others

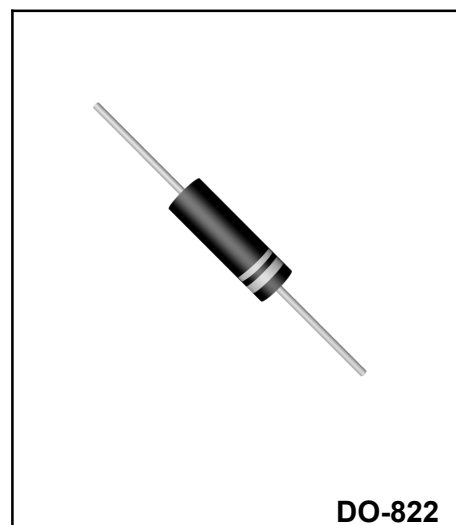
MECHANICAL DATA

◆Case: DO-822

◆Epoxy meets UL 94V-0 flammability rating

◆Terminals: Pure tin plated leads, solderable per J-STD-002 and JESD22-B102, E3 suffix for consumer grade, meet JESD201 class 1A whisker test.

◆Polarity: Color band denotes cathode end



DO-822

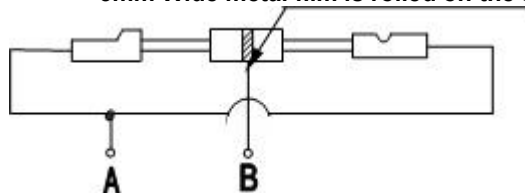
Maximum rating (Ta=25°C unless otherwise noted)

Parameter		Symbols	UX-F15B	Units
Repetitive peak reverse voltage		V_{RRM}	15	KV
Average forward current	60Hz half-sine wave, Resistance load, $T_a \leq 60^\circ\text{C}$	$I_{F(AV)}$	200	mA
Surge(Non-repetitive)forward current	60Hz half-sine wave, 1cycle, $T_a = 25^\circ\text{C}$	I_{FSM}	15	A
Peak forward voltage	$I_{FM} = 200\text{mA}$	V_{FM}	17	V
Peak reverse current	$V_{RM} = V_{RRM}$	I_{RRM1}	10	μA
Reverse recovery time	$I_F = I_R = 100\text{mA}$, 90% recovery point	t_{rr}	0.08	μs
Virtual junction temperature		$T_{(vj)}$	120	$^\circ\text{C}$
Storage Temperature Range		T_{stg}	-40 ~ +130	$^\circ\text{C}$

Notes: Cooling Requirement: Cathode terminal is fastened to radiating fin that size is more than 50mm×50mm×0.6mm Wind-cooled velocity is more than 0.5m/s

Safety Test

3mm Wide metal film is rolled on the surface middle of diode body

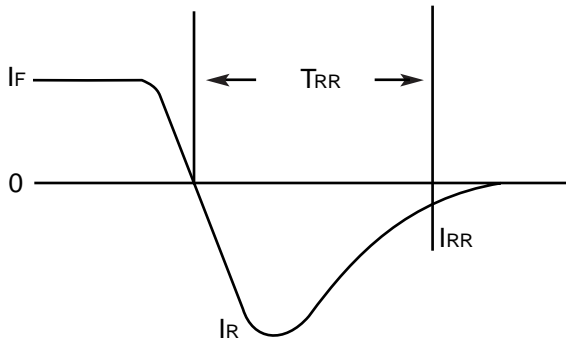


1. Insulation Resistance Test: 500V DC voltage is added between A and B. The measurement by insulation resistance meter is big than 1000MΩ.

2. Resistance To Voltage Strength Test: 15kV half-sine wave voltage is added between A and B for one minute and no breakdown or arc in insulation oil.

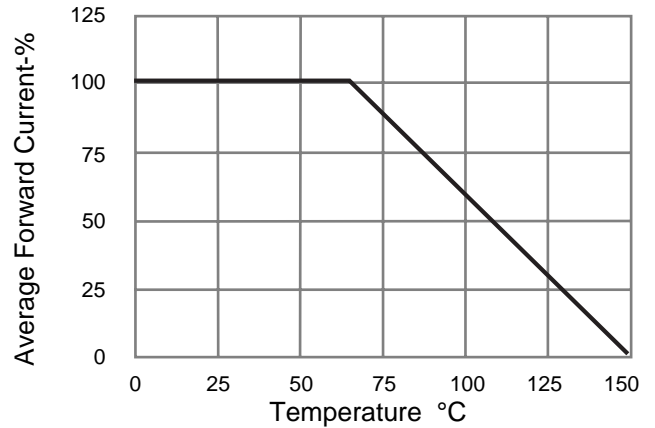
Typical characteristics

Reverse Recovery Measurement Waveform



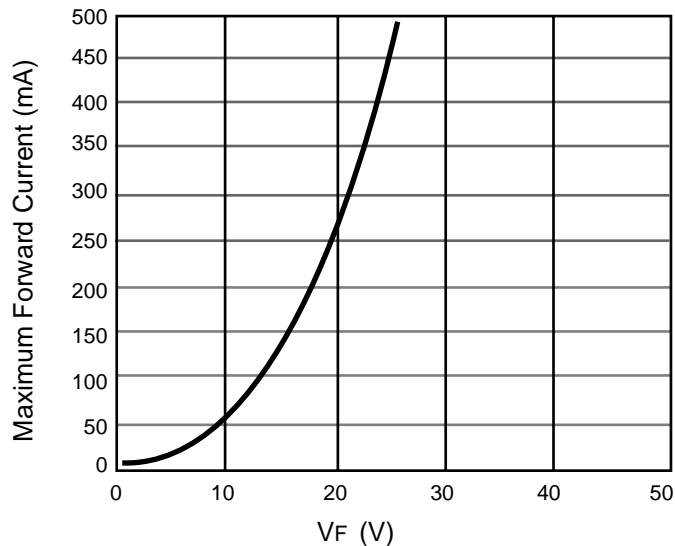
Typical data capture points: $I_F = 0.5I_R$, $I_R, I_{RR} = 0.25I_R$
 I_R is typically the rated average forward current maximum (I_{FAVM}) of the D.U.T.

Forward Current Derating Curve

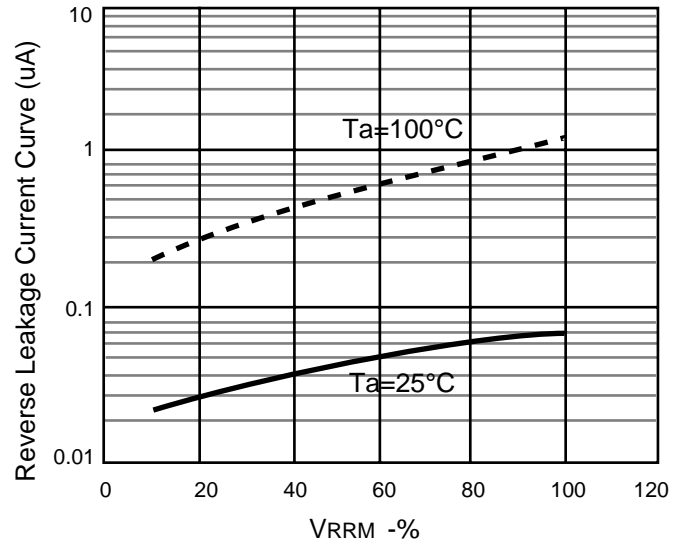


— 150 °C (All other part number)

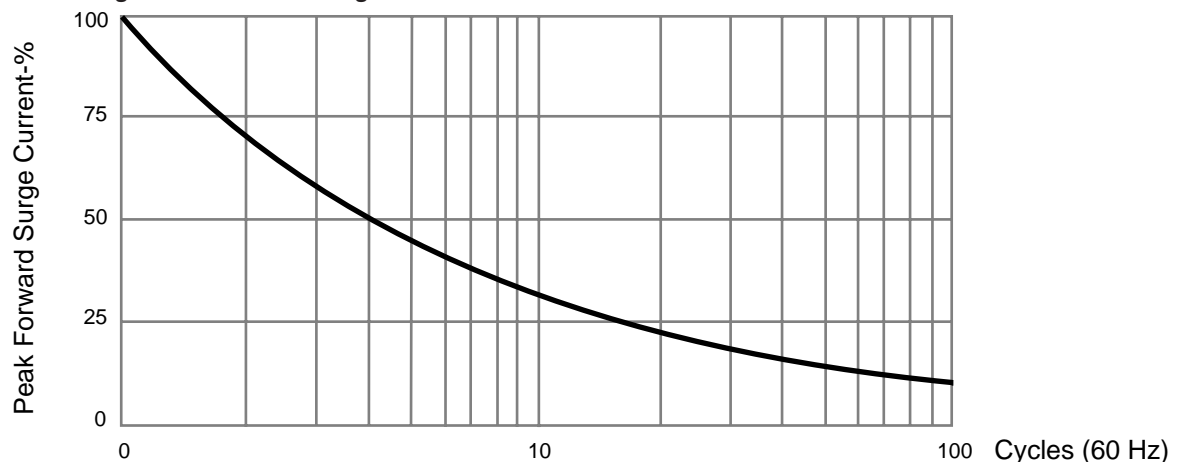
Positive Characteristic Curve



Reverse Leakage Current Curve With Voltage Variation



Repetitive Surge Current Derating Curve



This curve represents the percentage of published maximum surge rating as a function of surge repetition.

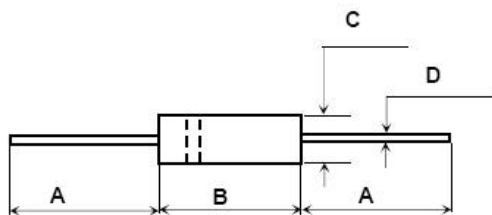
Note: Specifications subject to change without notice. Photo is representation only.

Ordering information

Package	Packing Description	Packing Quantity
DO-822	ammo pack	500PCS/ Inner Box 5000PCS/Carton

Package Dimensions(Millimeter(mm))

DO-822



Dim.	Inches		Millimeters	
	Min.	Max.	Min.	Max.
A	0.787		20	
B	0.846	0.886	21.5	22.5
C	0.276	0.315	7.0	8.0
D	0.046	0.048	1.17	1.23

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