

1N6838

Ultra-Fast Recovery High Voltage Silicon Rectifying Diode 1.5A 2.0kV 50ns

NJS high voltage silicon rectifier diode is made of high quality glass passivated chip and high reliability epoxy resin sealing structure, and through professional testing equipment inspection qualified.

Features:

High reliability design

GPP Chip

Epoxy resin molded in vacuum Have anticorrosion in the surface.

High frequency, super fast recovery

Conform to RoHS

Applications:	HVGT Name:	Unit: (mm)
High voltage multiplier circuit. X-ray power supply. General purpose high voltage rectifier. Other.	DO-590 Lead Diameter 1.28±0.03	
Mechanical Data:		
Case: epoxy resin molding. Terminal: welding axis. Net weight: 2.1 grams (approx).		

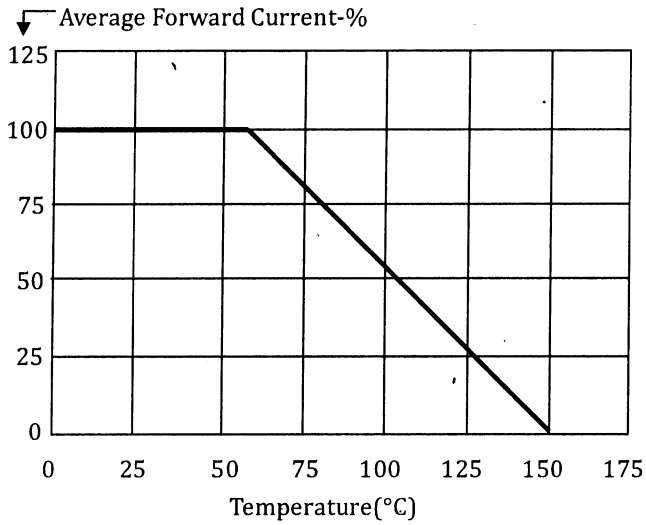
Maximum Ratings And Characteristics: (Absolute Maximum Ratings)

Items	Symbols	Condition	Data Value	Units
Repetitive Peak Reverse Voltage	V _{RRM}	T _A =25°C	2.0	kV
Non-Repetitive Peak Reverse Voltage	V _{RSM}	T _A =25°C	--	kV
Average Forward Current Maximum	I _{FAVM}	T _A =55°C	1.5	A
		T _L =100°C (L=0.375")	1.0	A
Non-Repetitive Forward Surge Current	I _{FSM}	T _A =25°C; 60Hz Half-Sine Wave; 8.3mS	60	A
Junction Temperature	T _J		150	°C
Allowable Operation Case Temperature	T _C		-55~+150	°C
Storage Temperature	T _{STG}		-55~+175	°C

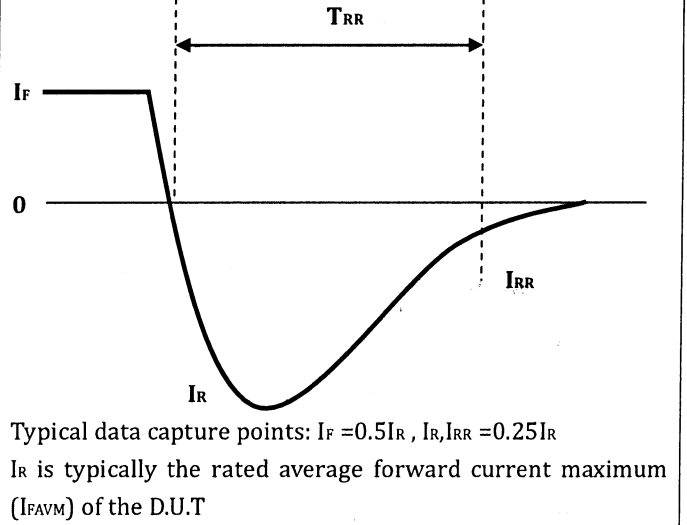
Electrical Characteristics: T_A=25°C (Unless Otherwise Specified)

Items	Symbols	Condition	Data value	Units
Maximum Forward Voltage Drop	V _{FM}	at 25°C; at I _{FAVM}	4.0	V
Maximum Reverse Current	I _{R1}	at 25°C; at V _{RRM}	1.0	uA
	I _{R2}	at 100°C; at V _{RRM}	25	uA
Maximum Reverse Recovery Time	T _{RR}	at 25°C; I _F =0.5I _R ; I _R =I _{FAVM} ; I _{RR} =0.25I _R	50	nS
Junction Capacitance	C _J	at 25°C; V _R =50VDC; f=1KHz	25	pF

Forward Current Derating Curve



Reverse Recovery Measurement Waveform



Non-Repetitive Surge Current

