ESJG05F16 50mA 16kV 80nS

High Temperature High Voltage Silicon Rectifier Diodes

HVGT high voltage silicon rectifier diodes is made of high quality glass passivated chip and high reliability epoxy resin sealing structure, and through professional testing equipment inspection qualified after to customers.

FEATURES:

1. High reliability design.
2. High voltage design.
3. High frequency .
4. Conform to RoHS.
5. Epoxy resin molded in vacuumHave anticorrosion in the surface.
6. High temperature.

APPLICATIONS:

1. High voltage multiplier circuit
2. Electrostatic generator circuit .
3. General purpose high voltage rectifier.
4. Other.

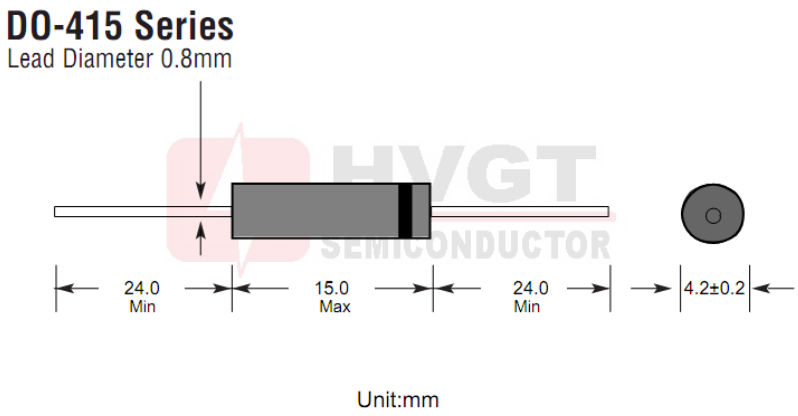
MECHANICAL DATA:

1. Case: epoxy resin molding.
2. Terminal: welding axis.
3. Net weight: 0.65 grams (approx).

SHAPE DISPLAY:



SIZE: (Unit:mm) **HVGT NAME: DO-415**



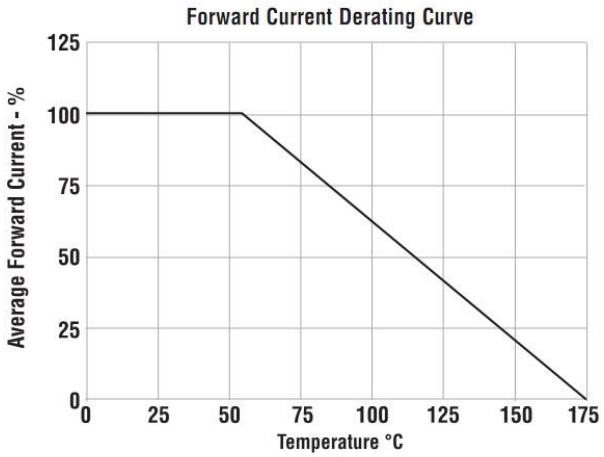
MAXIMUM RATINGS AND CHARACTERISTICS: (Absolute Maximum Ratings)

Items	Symbols	Condition	Data Value	Units
Repetitive Peak Renerse Voltage	V_{RRM}	Ta=25°C;	16	kV
Average Output Current	I_F	Ta=55°C;Resistive Load	50	mA
Suege Current	I_{FSM}	Ta=25°C; Half-Sine(60Hz); 8.3mS	5.0	A
Junction Temperature	T_J		-55~+175	°C
Allowable Operation Case Temperature	Tc		150	°C
Storage Temperature	T_{STG}		-55~+175	°C

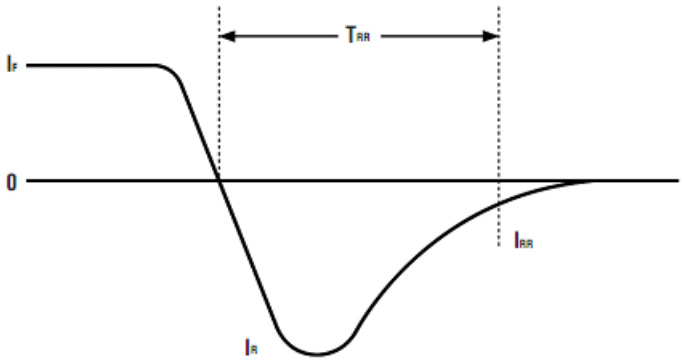
ELECTRICAL CHARACTERISTICS: Ta=25°C (Unless otherwise specified)

Items	Symbols	Condition	Data value	Units
Maximum Forward Voltage Drop	V_F	at 25°C;I_F =$I_{F(AV)}$	24	V
Maximum Reverse Current	I_R1	at 25°C;V_R =V_{RRM}	2.0	uA
	I_R2	at 100°C;V_R =V_{RRM}	50	uA
Maximum Reverse Recovery Time	T_{RR}	at 25°C; I_F=0.5I_R; I_R=I_{FAVM}; I_{RR}=0.25I_R	80	nS
Junction Capacitance	C_J	at 25°C; V_R=0V; f=1MHz	2.5	pF

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



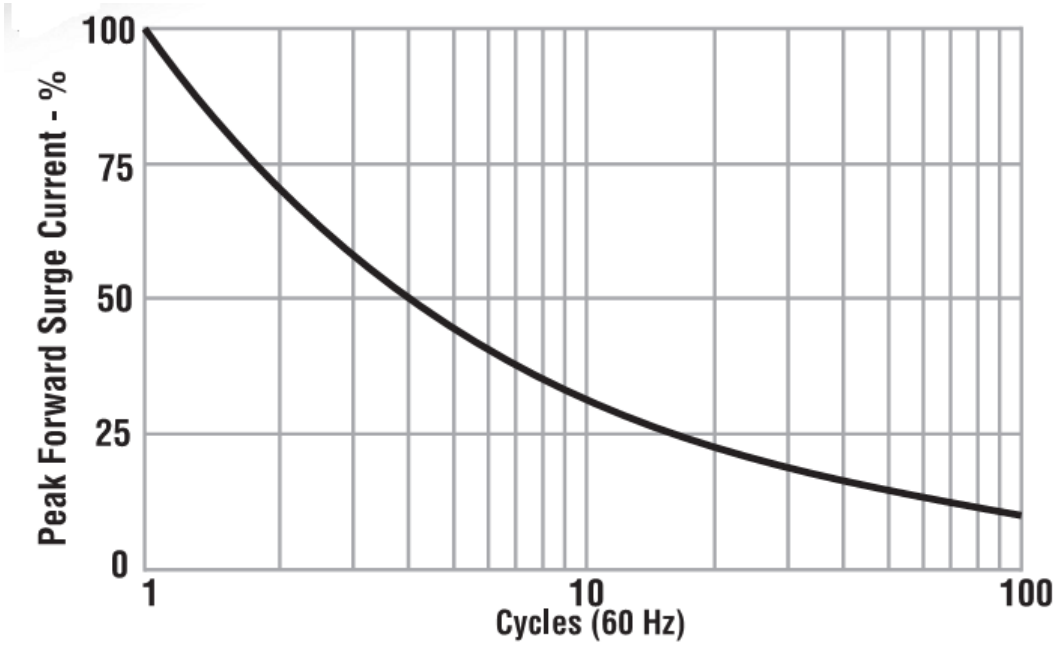
Average current rating at 55°C unless otherwise specified.
Max operating temperature is 175°C unless otherwise specified.



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
	ESJG05F16	ESJG05F16	