

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.

SHAPE DISPLAY:

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:

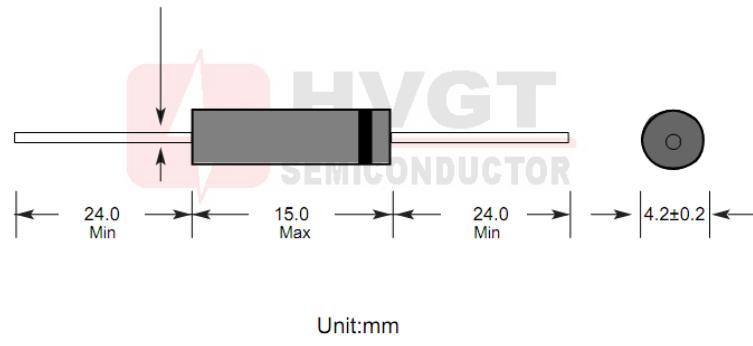
1. High voltage multiplier circuit
2. Electrostatic generator circuit .
3. General purpose high voltage rectifier.
4. Other.

MECHANICAL DATA:

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

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

Lead Diameter 0.8mm



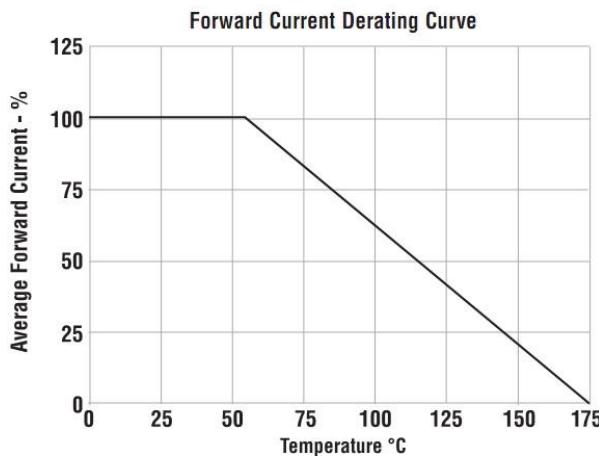
Unit:mm

MAXIMUM RATINGS AND CHARACTERISTICS: (Absolute Maximum Ratings)

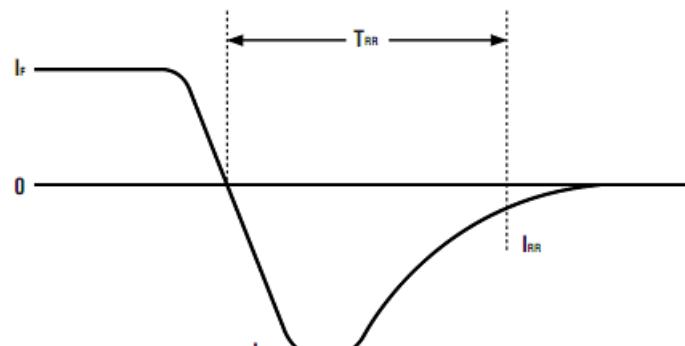
Items	Symbols	Condition	Data Value	Units
Repetitive Peak Reverse Voltage	V_{RRM}	Ta=25°C;	16	kV
Average Output Current	I_F	Ta=55°C; Resistive Load	50	mA
Surge Current	I_{FSM}	Ta=25°C; Half-Sine(60Hz); 8.3mS	5.0	A
Junction Temperature	T_J		-55~+175	°C
Allowable Operation Case Temperature	T_c		150	°C
Storage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

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

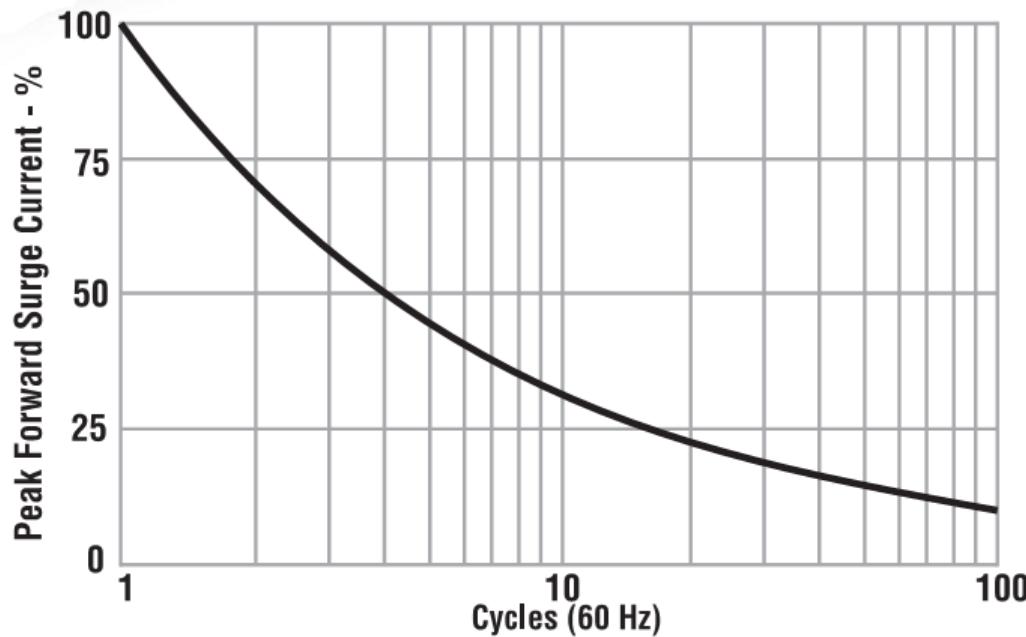
Items	Symbols	Condition	Data value	Units
Maximum Forward Voltage Drop	V_F	at 25°C; $I_F = I_{F(AV)}$	24	V
Maximum Reverse Current	I_{R1}	at 25°C; $V_R = V_{RRM}$	2.0	uA
	I_{R2}	at 100°C; $V_R = V_{RRM}$	50	uA
Maximum Reverse Recovery Time	T_{RR}	at 25°C; $I_F=0.5I_R$; $I_R=I_{FAVM}$; $I_{RR}=0.25I_R$	80	nS
Junction Capacitance	C_J	at 25°C; $V_R=0V$; $f=1MHz$	2.5	pF

Fig 1
Forward Current Derating Curve


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

Fig 2
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

ESJG05F16

Code

ESJG05F16

Cathode Mark
