

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. Low frequency .
4. Conform to RoHS.
5. Epoxy resin molded in vacuumHave anticorrosion in the surface.

**APPLICATIONS:**

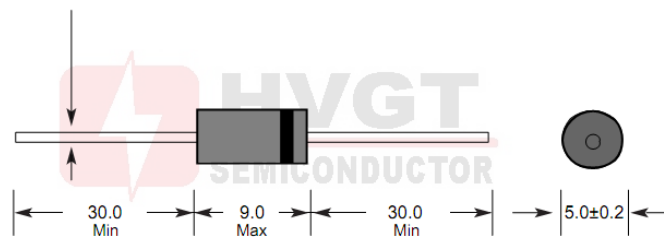
1. High voltage multiplier circuit
2. High current and high voltage circuit.
3. General purpose high voltage rectifier.
4. Other .

**MECHANICAL DATA:**

1. Case: epoxy resin molding.
2. Terminal: welding axis.
3. Net weight: 1.2 grams (approx).

**SIZE: (Unit:mm)****HVGT NAME: DO-590****DO-590 Series**

Lead Diameter 1.2mm



Unit:mm

**MAXIMUM RATINGS AND CHARACTERISTICS: (Absolute Maximum Ratings)**

Items	Symbols	Condition	Data Value	Units
Repetitive Peak Reverse Voltage	$V_{RRM}$	$T_a=25^{\circ}\text{C};$	2.0	kV
Average Output Current	$I_F$	$T_a=55^{\circ}\text{C};$ Resistive Load	1000	mA
Surge Current	$I_{FSM}$	$T_a=25^{\circ}\text{C};$ 1/2 Sine(60Hz) ; 8.3mS	40	A
Junction Temperature	$T_J$		-40~+150	$^{\circ}\text{C}$
Allowable Operation Case Temperature	$T_c$		125	$^{\circ}\text{C}$
Storage Temperature	$T_{STG}$		-40~+150	$^{\circ}\text{C}$

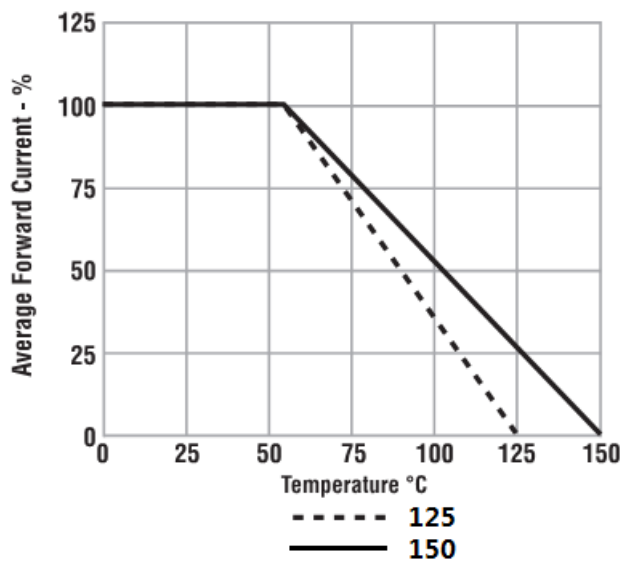
**ELECTRICAL CHARACTERISTICS:  $T_a=25^{\circ}\text{C}$  (Unless otherwise specified)**

Items	Symbols	Condition	Data value	Units
Maximum Forward Voltage Drop	$V_F$	at $25^{\circ}\text{C}; I_F = I_{F(AV)}$	2.4	V
Maximum Reverse Current	$I_{R1}$	at $25^{\circ}\text{C}; V_R = V_{RRM}$	5.0	$\mu\text{A}$
	$I_{R2}$	at $100^{\circ}\text{C}; V_R = V_{RRM}$	50	$\mu\text{A}$
Maximum Reverse Recovery Time	$T_{RR}$	at $25^{\circ}\text{C}; I_F=0.5I_R; I_R=I_{F(AV)}; I_{RR}=0.25I_R$	--	nS
Junction Capacitance	$C_J$	at $25^{\circ}\text{C}; V_R=0\text{V}; f=1\text{MHz}$	--	pF



**Fig 1**

**Forward Current Derating Curve**

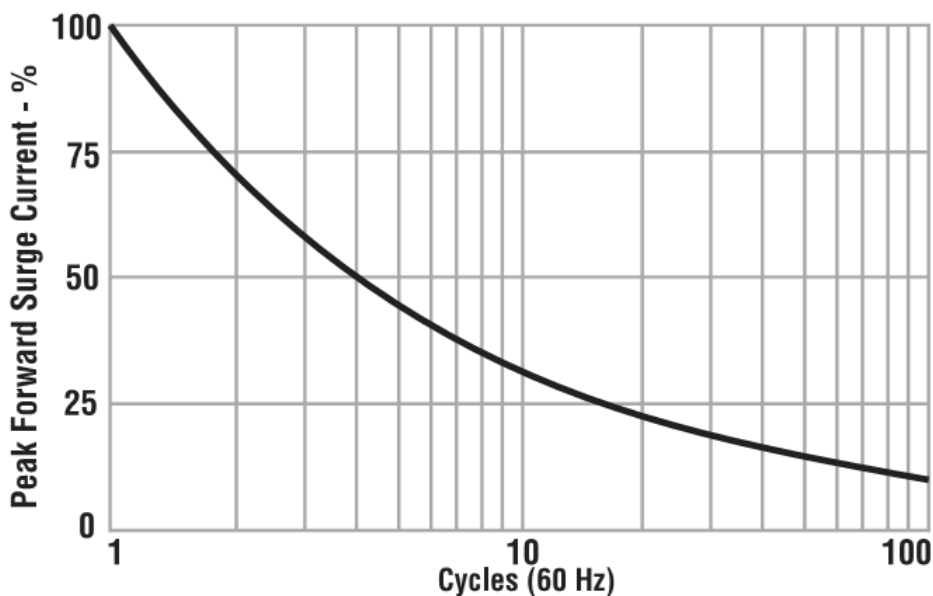


Show average current rating at 55°C,

Unless otherwise specified. Max operating temperature is 150°C, unless otherwise specified.

**Fig 2**

**Repetitive Surge Current Derating Curve**



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

Marking	Type	Code	Cathode Mark
	BR02	BR2	