

**INTRODUCE:**

HVGT Half Bridge high voltage silicon rectifier assembly is made of high quality silicon GPP 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. Power frequency ratio.
4. Conform to RoHS and SGS.
5. Epoxy resin molded in vacuumHave anticorrosion in the surface.

**APPLICATIONS:**

1. High voltage generator.
2. Industrial microwave power supply.
3. High voltage rectifier used in electrostatic cleaning.

**MECHANICAL DATA:**

1. Case: epoxy resin molding.
2. Terminal: screw holes M6.
3. Net weight: 1600 grams (approx).

**SHAPE DISPLAY:**

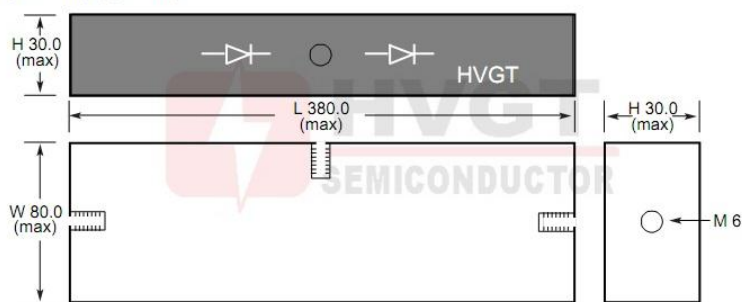


**SIZE: (Unit:mm)**

**HVGT NAME: HVD-380**

**HVD-380 Series**

Screw Holes M6



Unit:mm

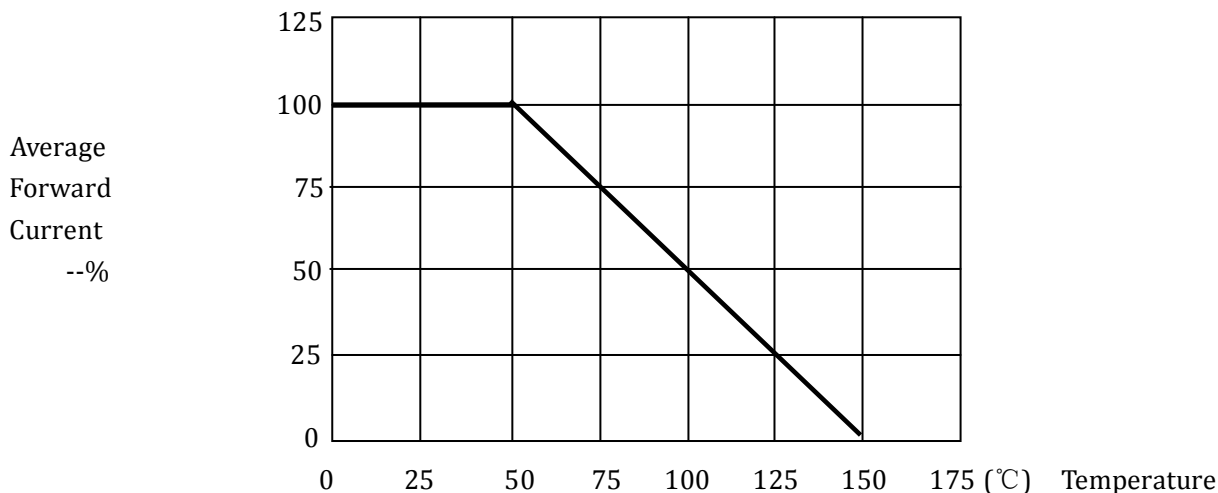
**MAXIMUM RATINGS AND CHARACTERISTICS: (Absolute Maximum Ratings)**

Items	Symbols	Condition	Data Value	Units
Repetitive Peak Reverse Voltage	$V_{RRM}$	$T_A=25^{\circ}C; I_R=1.0\mu A$	40	kV
Peak Working Reverse Voltage	$V_{RWM}$	$T_A=25^{\circ}C; I_R=1.0\mu A$	40	kV
Non-Repetitive Peak Reverse Voltage	$V_{RSM}$	$T_A=25^{\circ}C; I_R=1.0\mu A$	48	kV
Average Forward Current Maximum	$I_{FAVM}$	$T_A=50^{\circ}C; 50Hz$ Half-sine Wave; Resistance load	10	A
Non-Repetitive Forward Surge Current	$I_{FSM}$	$T_A=25^{\circ}C; 50Hz$ Half-Sine Wave; 8.3ms	200	A
Junction Temperature	$T_J$		150	$^{\circ}C$
Allowable Operation Case Temperature	$T_C$		-40~+150	$^{\circ}C$
Storage Temperature	$T_{STG}$		-40~+150	$^{\circ}C$

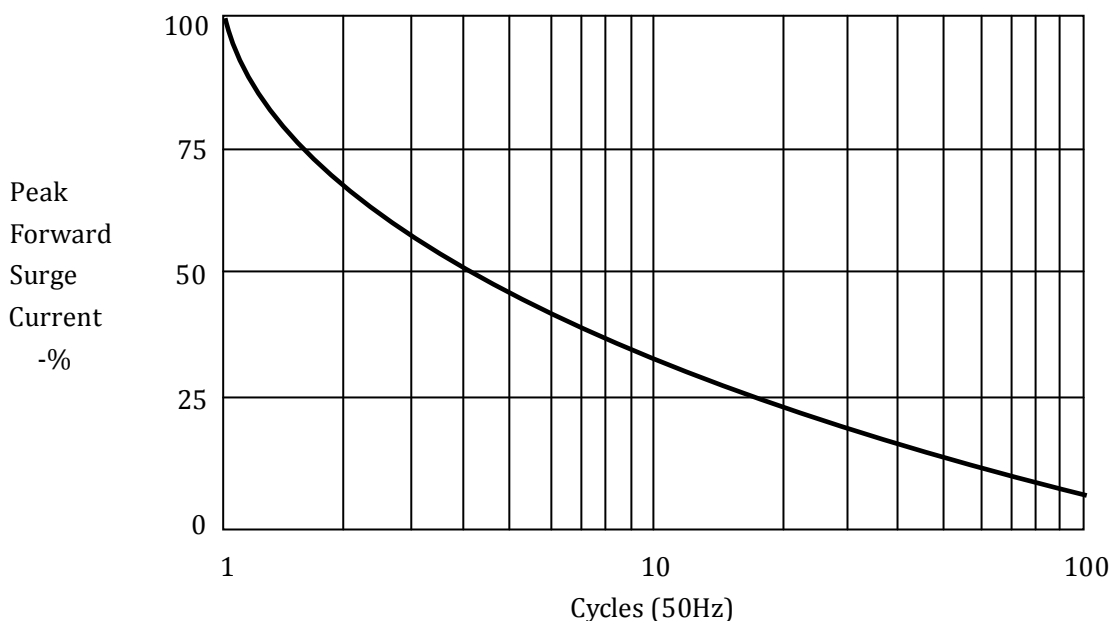
**ELECTRICAL CHARACTERISTICS:  $T_A=25^{\circ}C$  (Unless Otherwise Specified)**

Items	Symbols	Condition	Data value	Units
Maximum Forward Voltage Drop	$V_{FM}$	at $25^{\circ}C$ ; at $I_{FAVM}$	48	V
Maximum Reverse Current	$I_{R1}$	at $25^{\circ}C$ ; at $V_{RRM}$	10	$\mu A$
	$I_{R2}$	at $100^{\circ}C$ ; at $V_{RRM}$	100	$\mu A$
Maximum Reverse Recovery Time	$T_{RR}$	at $25^{\circ}C$ ; $I_F=0.5I_R$ ; $I_R=I_{FAVM}$ ; $I_{RR}=0.25I_R$	--	nS
Junction Capacitance	$C_J$	at $25^{\circ}C$ ; $V_R=0V$ ; $f=1MHz$	--	pF


**Forward Current Derating Curve**



**Non-Repetitive Surge Current**



**MARKING:**

Marking	Type	Code	Cathode Mark
	HBG100D040D	HBG100D040D HVGT	

**PART NUMBER NOTE:**

Type	Chip	I <sub>F(AV)</sub>	Frequency	V <sub>RRM</sub>	T <sub>RR</sub>
<b>HB</b>	<b>G</b>	<b>100</b>	<b>D</b>	<b>040</b>	<b>D</b>
Half Bridge Series	GPP Chip	10A	D=Doubler. P=Positive Center Tap. N=Negative Center Cap.	40kV	(U)75ns (G)100ns (D) Standard Recovery Time