

**INTRODUCE:**

HVGT high voltage bridge rectifier 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. Single phase bridge rectifier.
4. Conform to RoHS and SGS.
5. Epoxy resin molded in vacuum Have anticorrosion in the surface.

**APPLICATIONS:**

1. High voltage AC power rectifier
2. High pressure instrument.
3. General purpose high voltage rectifier.
4. Other.

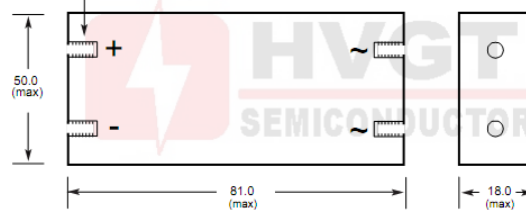
**MECHANICAL DATA:**

1. Case: epoxy resin molding.
2. Terminal: screw holes M3.
3. Net weight: 120 grams (approx).

**SHAPE DISPLAY:**

**SIZE: (Unit:mm)**
**HVGT NAME: HVQ-805**
**HVQ-805 Series**

Screw Holes M3



Unit:mm

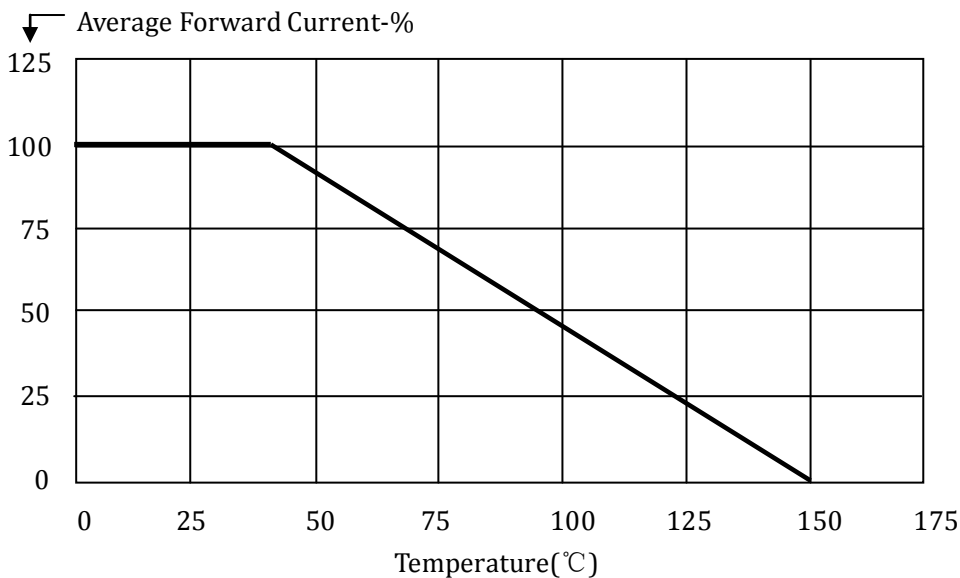
**MAXIMUM RATINGS AND CHARACTERISTICS: (Absolute Maximum Ratings)**

Items	Symbols	Condition	Data Value	Units
Repetitive Peak Reverse Voltage	$V_{RRM}$	$T_A=25^{\circ}C$	5.0	kV
Non-Repetitive Peak Reverse Voltage	$V_{RSM}$	$T_A=25^{\circ}C$	6.0	kV
Average Forward Current Maximum	$I_{FAVM}$	$T_A=40^{\circ}C$	2.0	A
		$T_{OIL}=55^{\circ}C$	3.0	A
Non-Repetitive Forward Surge Current	$I_{FSM}$	$T_A=25^{\circ}C$ ; 50Hz Half-Sine Wave; 8.3ms	40	A
Junction Temperature	$T_J$		150	$^{\circ}C$
Allowable Operation Case Temperature	$T_c$		-40~+150	$^{\circ}C$
Storage Temperature	$T_{STG}$		-40~+150	$^{\circ}C$

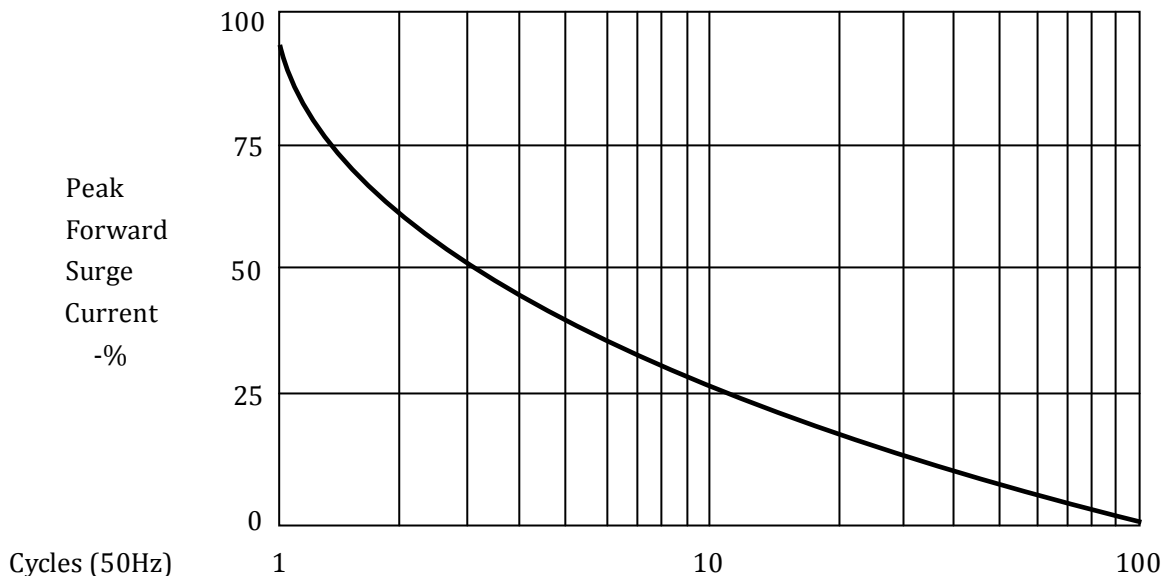
**ELECTRICAL CHARACTERISTICS:  $T_A=25^{\circ}C$  (Unless Otherwise Specified)**

Items	Symbols	Condition	Data value	Units
Maximum Forward Voltage Drop	$V_{FM}$	at $25^{\circ}C$ ; at $I_{FAVM}$	5.5	V
Maximum Reverse Current	$I_{R1}$	at $25^{\circ}C$ ; at $V_{RRM}$	2.0	$\mu A$
	$I_{R2}$	at $100^{\circ}C$ ; at $V_{RRM}$	50	$\mu A$
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:**

Type	Code	Cathode Mark
HVQL20MB050D	HVQL20MB050D HVGT	+ ~ ~ -

**MODEL NOTE:**

Type	I <sub>F(AV)</sub>	Device structure	V <sub>RRM</sub>	Frequency
<b>HVQL</b>	<b>20</b>	<b>MB</b>	<b>050</b>	<b>D</b>
High Voltage Bridge Rectifier Series	2.0A	(MB)=Single-phase (MT)=Three-phase	5.0KV	(D)=Low frequency (G)=High frequency