

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 vacuum Have 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 M5.
3. Net weight: 145.0 grams (approx).

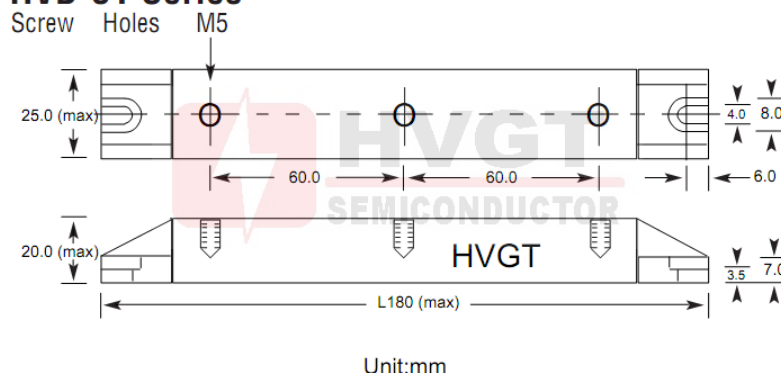
SHAPE DISPLAY:



SIZE: (Unit:mm)

HVGT NAME: HVD-31

HVD-31 Series



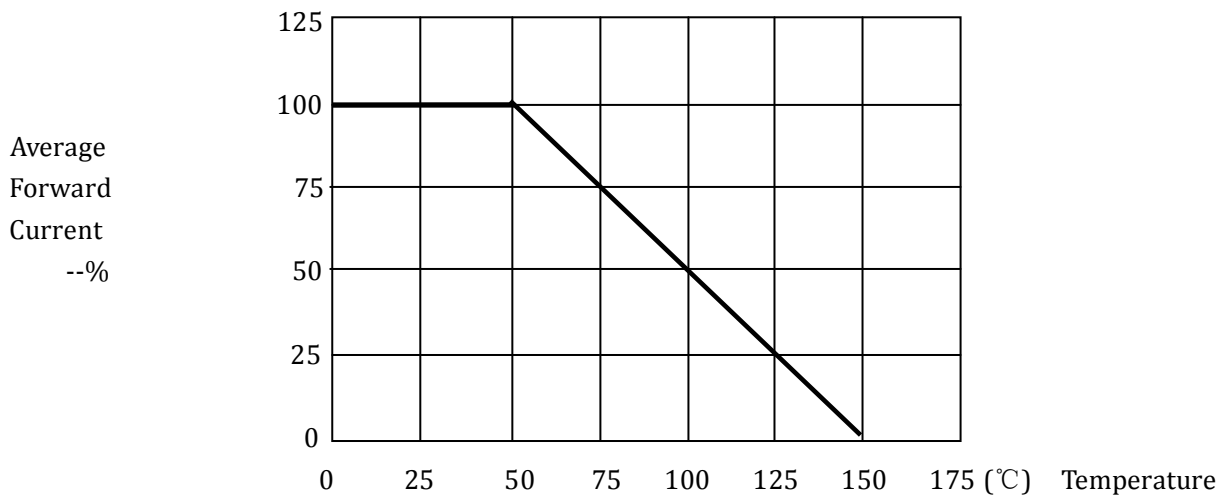
MAXIMUM RATINGS AND CHARACTERISTICS: (Absolute Maximum Ratings)

Items	Symbols	Condition	Data Value	Units
Repetitive Peak Reverse Voltage	V_{RRM}	$T_A=25^{\circ}C; I_R=1.0\mu A$	36	kV
Peak Working Reverse Voltage	V_{RWM}	$T_A=25^{\circ}C; I_R=1.0\mu A$	36	kV
Non-Repetitive Peak Reverse Voltage	V_{RSM}	$T_A=25^{\circ}C; I_R=1.0\mu A$	40	kV
Average Forward Current Maximum	I_{FAVM}	$T_A=50^{\circ}C; 50Hz$ Half-sine Wave; Resistance load	1.0	A
Non-Repetitive Forward Surge Current	I_{FSM}	$T_A=25^{\circ}C; 50Hz$ Half-Sine Wave; 8.3ms	30	A
Junction Temperature	T_J		150	$^{\circ}C$
Allowable Operation Case Temperature	T_C		-40~+150	$^{\circ}C$
Storage Temperature	T_{STG}		-40~+150	$^{\circ}C$

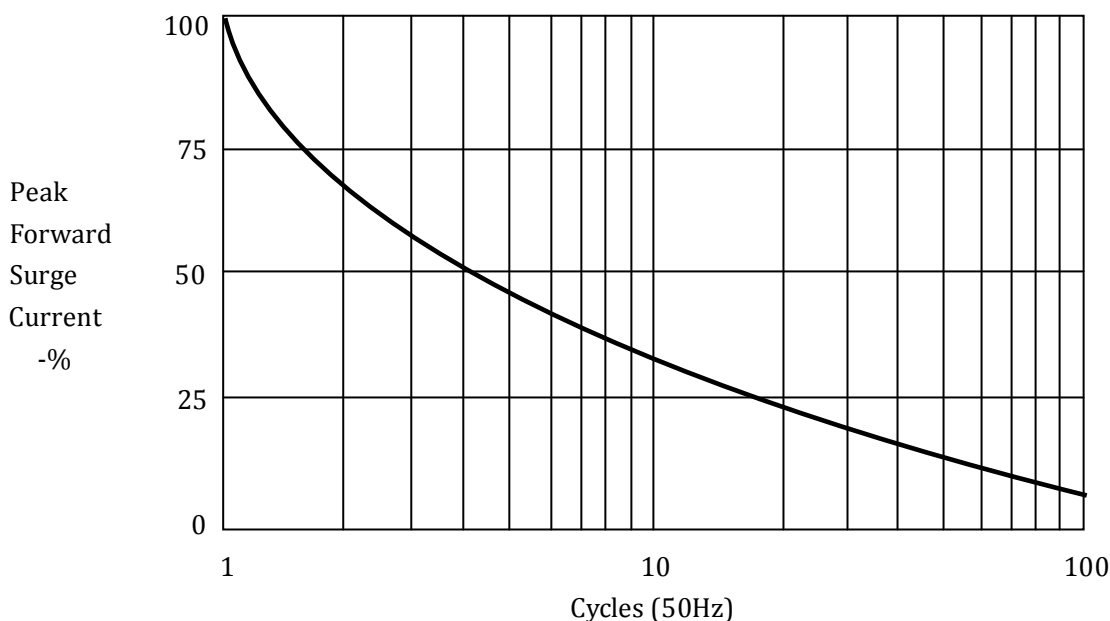
ELECTRICAL CHARACTERISTICS: $T_A=25^{\circ}C$ (Unless Otherwise Specified)

Items	Symbols	Condition	Data value	Units
Maximum Forward Voltage Drop	V_{FM}	at $25^{\circ}C; I_{FAVM}$	64	V
Maximum Reverse Current	I_{R1}	at $25^{\circ}C; V_{RRM}$	5.0	μA
	I_{R2}	at $100^{\circ}C; V_{RRM}$	50	μA
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
	HBG010D360D	HBG010D360D HVGT	

PART NUMBER NOTE:

Type	Chip	I _{F(AV)}	Frequency	V _{RRM}	T _{RR}
HB	G	010	D	360	D
Half Bridge Series	GPP Chip	1.0A	D=Doubler. P=Positive Center Tap. N=Negative Center Cap.	36kV	(U)75ns (G)100ns (D) Standard Recovery Time