HVR5510U12 1.0A 12kV 75nS

Ultra-Fast Recovery High Voltage Rectifier Assembly

INTRODUCE:

HVGT high voltage axial lead rectifier assembly is made of high quality silicon wafer chip and high reliability epoxy resin sealing structure, and through professional testing equipment inspection qualified after to customers.

FEATURES:

1. High reliability design.
2. Very high voltage.
3. High frequency, Ultra-fast recovery.
4. Conform to RoHS and SGS.
5. Epoxy resin molded in vacuumHave anticorrosion in the surface.

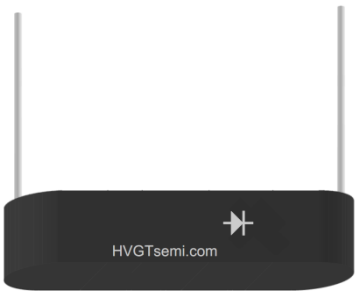
APPLICATIONS:

1. High voltage multiplier circuit
2. electrostatic precipitators.
3. General purpose high voltage rectifier.
4. X-ray machines.

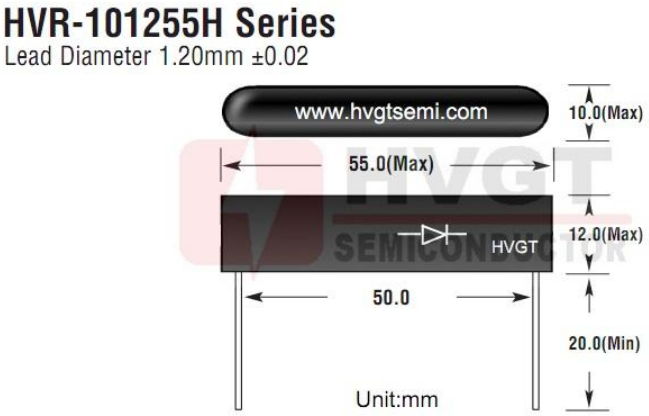
MECHANICAL DATA:

1. Case: epoxy resin molding.
2. Terminal: radial welding lead.
3. Net weight: 11.0 grams (approx).

SHAPE DISPLAY:



SIZE: (Unit:mm) HVGT NAME: HVR-101255H



MAXIMUM RATINGS AND CHARACTERISTICS: (Absolute Maximum Ratings)

Items	Symbols	Condition	Data Value	Units
Repetitive Peak Renerse Voltage	V_{RRM}	T_A=25°C	12	kV
Non-Repetitive Peak Renerse Voltage	V_{RSM}	T_A=25°C	14.4	kV
Average Forward Current Maximum	I_{FAVM}	T_A=40°C	1.0	A
		T_{OIL}=55°C	1.5	A
Non-Repetitive Forward Surge Current	I_{FSM}	T_A=25°C; 50Hz Half-Sine Wave; 8.3mS	20	A
Junction Temperature	T_J		125	°C
Allowable Operation Case Temperature	Tc		-40~+125	°C
Storage Temperature	T_{STG}		-40~+150	°C

ELECTRICAL CHARACTERISTICS: T_A=25°C (Unless Otherwise Specified)

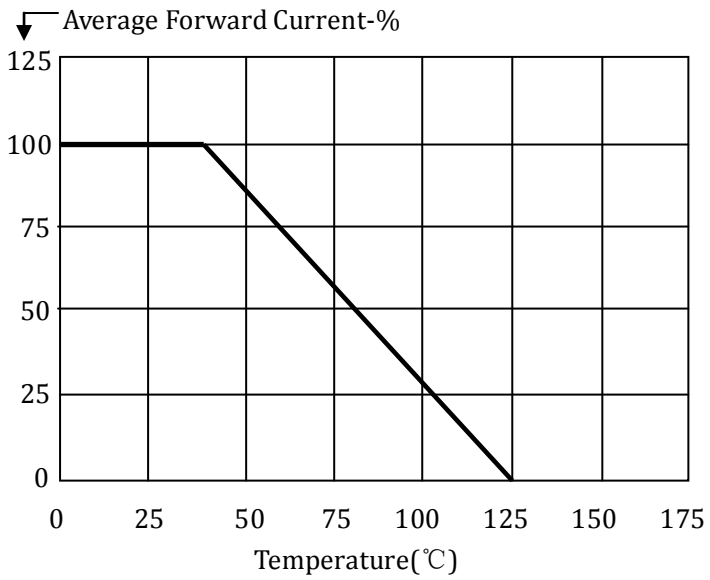
Items	Symbols	Condition	Data value	Units
Maximum Forward Voltage Drop	V_{FM}	at 25°C; at I_{FAVM}	21.6	V
Maximum Reverse Current	I_{R1}	at 25°C; at V_{RRM}	2.0	uA
	I_{R2}	at 100°C; at V_{RRM}	50	uA
Maximum Reverse Recovery Time	T_{RR}	at 25°C; I_F=0.5I_R; I_R=I_{FAVM}; I_{RR}=0.25I_R	75	nS
Junction Capacitance	C_J	at 25°C; V_R=0V; f=1MHz	--	pF

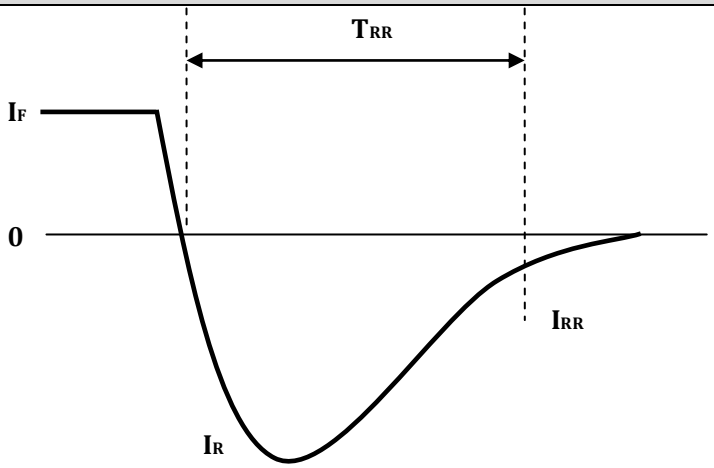
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Forward Current Derating Curve	Reverse Recovery Measurement Waveform

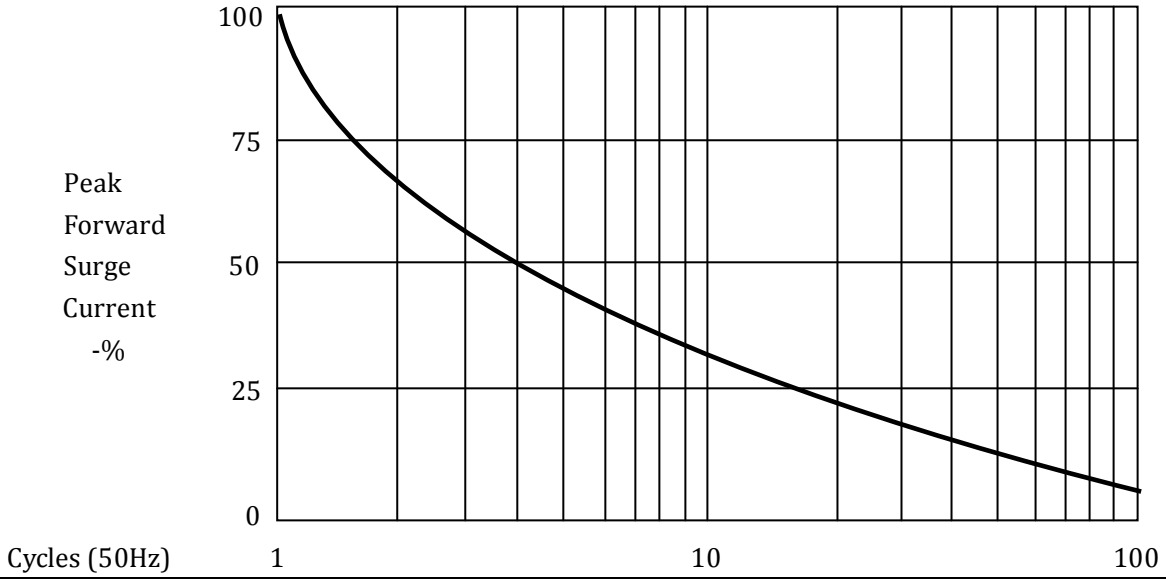




Typical data capture points: I_F =0.5I_R , I_R,I_{RR} =0.25I_R

I_R is typically the rated average forward current maximum (I_{FAVM}) of the D.U.T

Non-Repetitive Surge Current



MARKING:

Type	Code	Cathode Mark
HVR5510U12	HVR5510U12 HVGT	

MODEL NOTE:

Type	Chip	$I_{F(AV)}$	T_{RR}	V_{RRM}
HVR	**55**	**10**	**U**	**12**
Radial Lead Assembly Series	Structure	1.0A	(U)75ns (F)100ns (S) Standard Recovery Time	12kV

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