

INTRODUCE:

HVGT high voltage silicon rectifier diodes 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 overload surge capability.
2. Avalanche Characteristic.
3. Medium Current, Low Forward Voltage
4. Conform to RoHS and SGS.
5. Epoxy resin molded in vacuumHave anticorrosion in the surface.

APPLICATIONS:

1. Rectifier for high voltage power supply.
2. General purpose high voltage rectifier. .
3. Rectification for X-ray generator high voltage power supply.

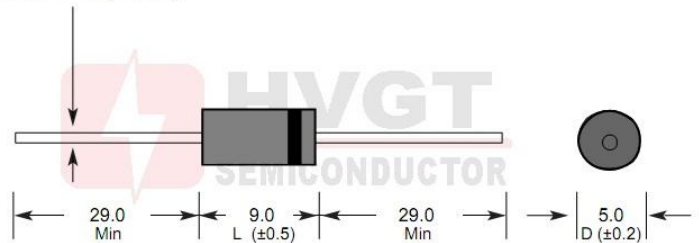
MECHANICAL DATA:

1. Case: epoxy resin molding.
2. Terminal: welding axis.
3. Net weight: 2.10 grams (approx).

SHAPE DISPLAY:

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

Lead Diameter 1.28 (±0.02)



Unit:mm

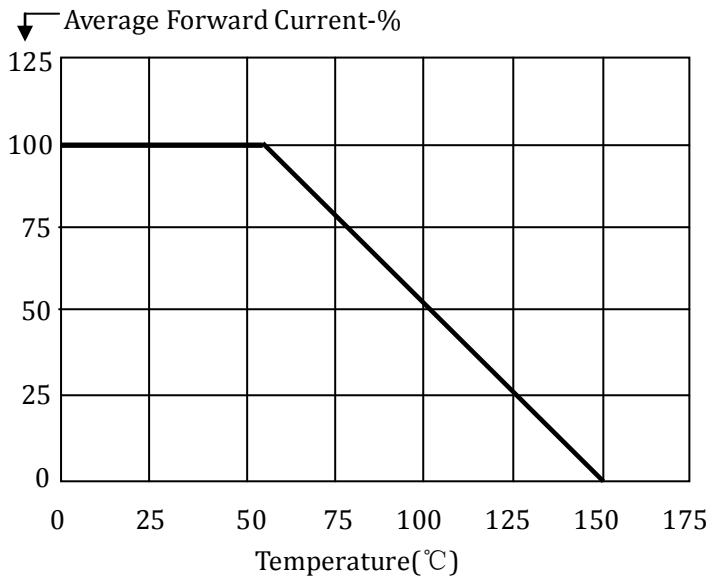
MAXIMUM RATINGS AND CHARACTERISTICS: (Absolute Maximum Ratings)

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}	$T_A=25^{\circ}C$	--	kV
Average Forward Current Maximum	I_{FAVM}	$T_A=55^{\circ}C$	600	mA
		$T_{OIL}=55^{\circ}C$	--	mA
Non-Repetitive Forward Surge Current	I_{FSM}	$T_A=25^{\circ}C$; 60Hz Half-Sine Wave; 8.3ms	20	A
Junction Temperature	T_J		150	$^{\circ}C$
Allowable Operation Case Temperature	T_C		-40~+150	$^{\circ}C$
Storage Temperature	T_{STG}		-55~+175	$^{\circ}C$

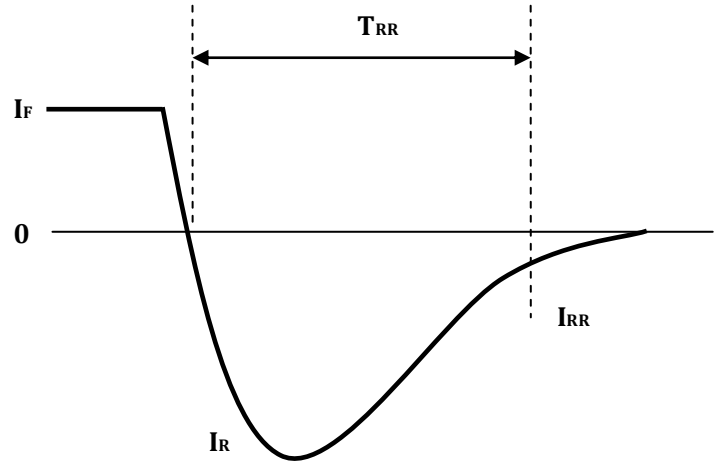
ELECTRICAL CHARACTERISTICS: $T_A=25^{\circ}C$ (Unless Otherwise Specified)

Items	Symbols	Condition	Data value	Units
Maximum Forward Voltage Drop	V_{FM}	at $25^{\circ}C$; at 100mA	8.8	V
Maximum Reverse Current	I_{R1}	at $25^{\circ}C$; at V_{RRM}	5.0	μA
	I_{R2}	at $100^{\circ}C$; at 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 $25^{\circ}C$; $V_R=0V$; $f=1MHz$	20	pF

Forward Current Derating Curve

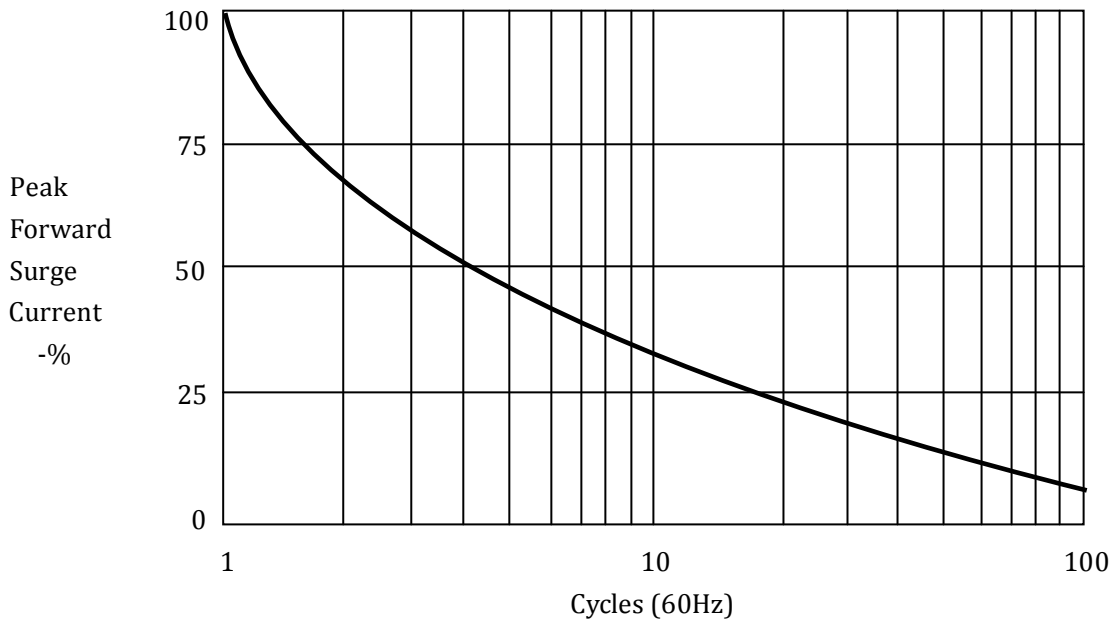


Reverse Recovery Measurement Waveform



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
	BR5F	BR5F HVGT	