

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. Fast switching.
2. Low leakage.
3. High current capability.
4. High surge capability.
5. High reliability.

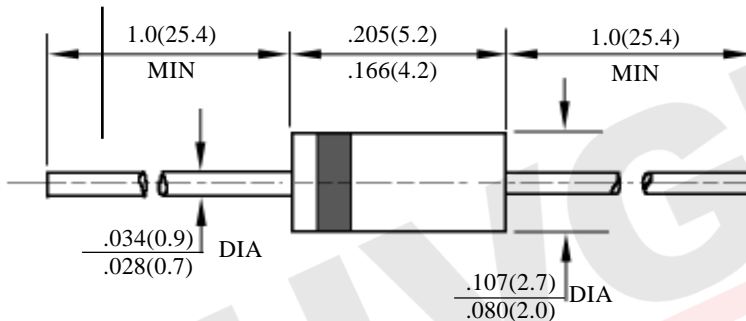
APPLICATIONS:

1. Detecting equipment.
2. General purpose high voltage rectifier.
3. X-ray voltage doubling circuit.
4. Microwave transmission power supply.

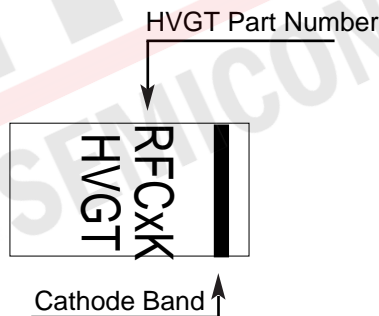
DRAWINGS: (Unit:mm)

DO-41 Series

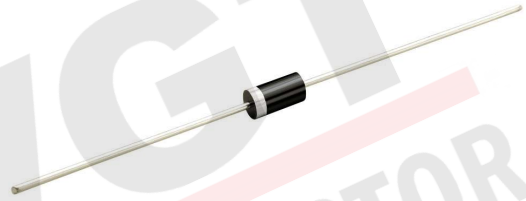
Lead Diameter 0.9mm



MARKING:



REFERENCE SHAPE:



HVGT SEMI Package Naming: DO-41

MECHANICAL DATA:

Case: Molded plastic.

Epoxy: UL94V-0 rate flame retardant.

Lead: MIL-STD- 202E, Method 208 guaranteed.

Polarity: Color band denotes cathode end.

Mounting position: Any.

Weight: 0.35 grams.

Maximum Ratings And Characteristics:

25°C ambient temperature unless stated otherwise.
 Single phase, half wave, 60Hz, resistive or inductive load.
 For capacitive load, derate current by 20%.

HVGT Part	V _{RRM}	V _{RMS}	V _{DC}	I _O	V _F	I _{R1}	I _{R2}	I _{FSM}	T _{RR}	C _J	R _{JL}
Number	V	V	V	mA	V	uA	uA	A	nS	pF	K/W
RFC2K	2000	1400	2000	200	4.0	5.0	100	30	500	30	98
RFC3K	3000	2100	3000	200	5.0	5.0	100	30	500	30	98
RFC4K	4000	2800	4000	200	6.5	5.0	100	30	500	30	98

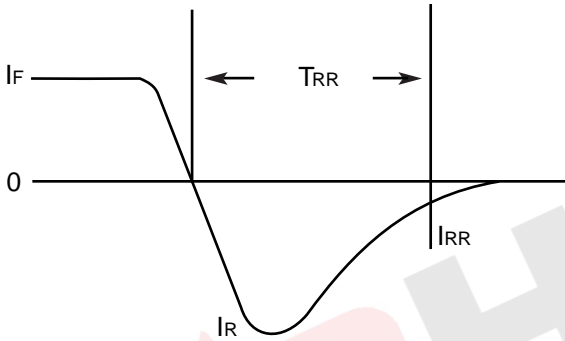
Temperature:

Storage Temperature: -65 to 150 °C
 Operating Temperature: -65 to 150 °C
 Maximum Junction Temperature: 150 °C

Specification Definitions:

Symbols	Items	Condition
V _{RRM}	Maximum Repetitive Reverse Voltage	--
V _{RMS}	Maximum RMS Volts	--
V _{DC}	Maximum DC Blocking Voltage	--
I _O	Maximum Average Forward Current	At T _A = 50°C
V _F	Maximum Forward Voltage Drop	At I _O
I _{R1}	Maximum Leakage Current	At V _{RRM} T _A = 25°C
I _{R2}	Maximum Leakage Current	At V _{RRM} T _L = 55°C
I _{FSM}	Maximum Surge Current	At 8.3 mS, Single Half Sine
T _{RR}	Maximum Reverse Recovery Time	I _F = 0.5A; I _R = -1.0A; I _{RR} = -0.25A
C _J	Typical Junction Capacitance	At V _R = 0VDC, f = 1MHz
R _{JL}	Typical Thermal Resistance Junction to Ambient	

FIGURE 01 Reverse Recovery Measurement Waveform



Typical data capture points: $I_F = 0.5A$, $I_R = -1.0A$, $I_{RR} = -0.25A$
 I_R is typically the rated average forward current maximum (I_{FAVM}) of the D.U.T.

FIGURE 02 Forward Current Derating Curve

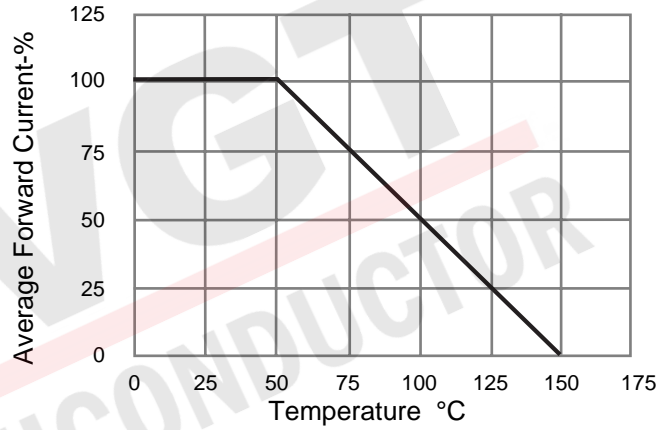


FIGURE 03 Positive Characteristic Curve

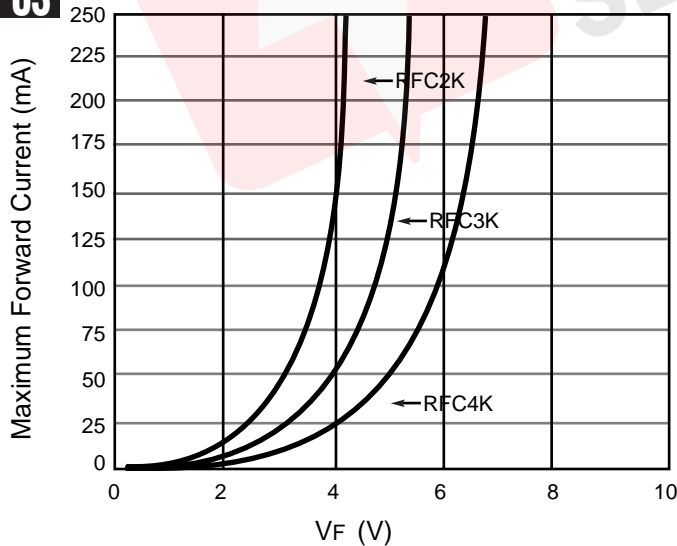


FIGURE 04 Reverse Leakage Current Curve With Voltage Variation

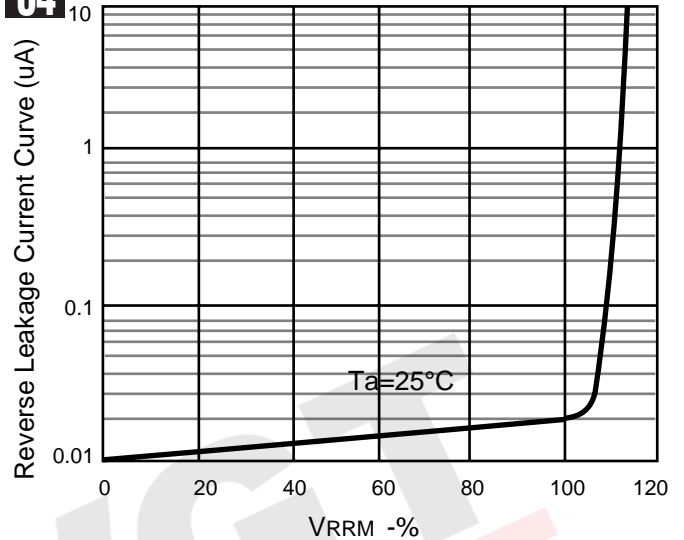
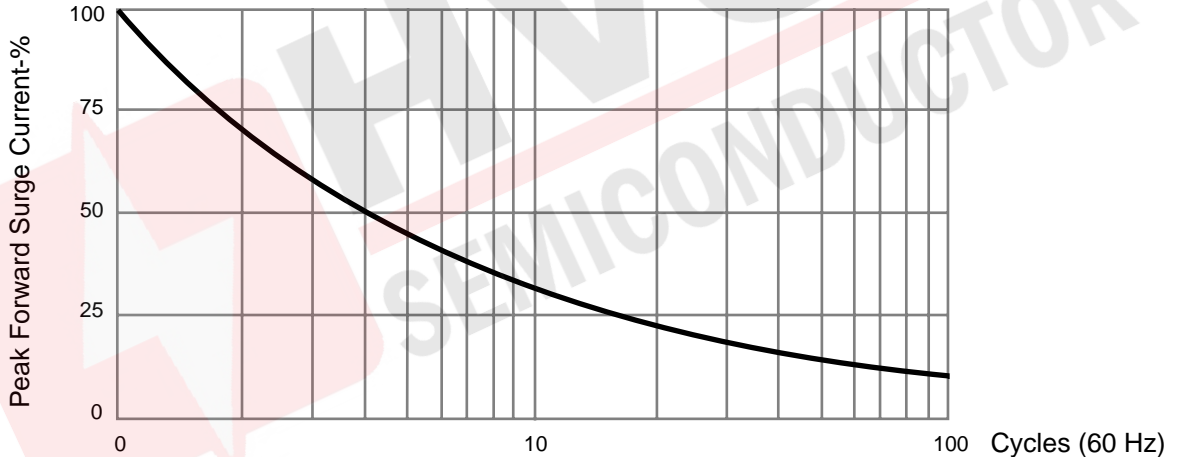


FIGURE 05 Repetitive Surge Current Derating Curve



This curve represents the percentage of published maximum surge rating as a function of surge repetition.

Note: Specifications subject to change without notice. Photo is representation only.
 Minimum standard packaging quantity: 5,000EA/box (roll and tape).