Surface Mount High Voltage Diodes

SMU0405JS SMU0405GS

0405 Series: 40mA , 5.0kV, 60nS.

INTRODUCE:

HVGT brand high voltage silicon rectifier diodes is made of high quality glass passivated chip and high reliability epoxy resin sealing structure,and through professional testing equipment inspection qualified after to customers.

REFERENCE SHAPE:

RoHS COMPLIANT

SMA-JS SMA-GS

FEATURES:

1. Design of glass passivation chip(GPP).
2. Fast recovery time.
3. J Lead or Gullwing Package Option.
4. Surface Mount Package.
5. Epoxy resin molded in vacuum.
6. Have anticorrosion in the surface.
7. ANSI/UL94 V-0 Rated Material.

APPLICATIONS:

1. Detecting equipment.
2. General purpose high voltage rectifier.
3. X-ray voltage doubling circuit.
4. Automotive Electronics.

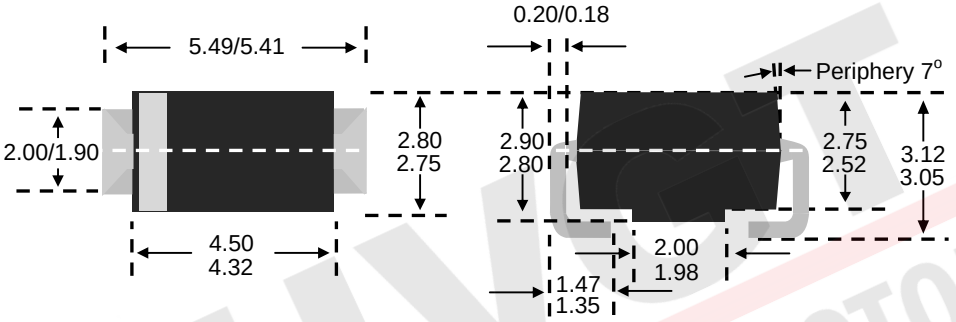
MECHANICAL DATA:

1. Case: epoxy resin molding.
2. Terminal:Surface mount welding.
3. Net weight: 0.09 grams (approx).

DRAWINGS: (Unit:mm)

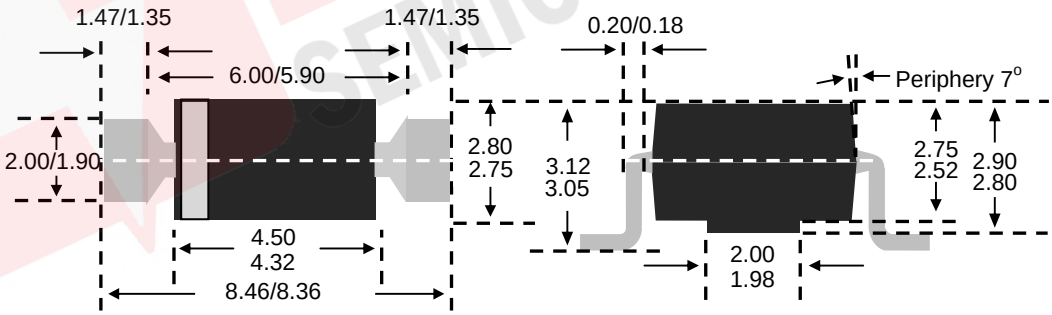
SMA-JS Series

SMA Lead



SMA-GS Series

SMA-G Lead



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Maximum Ratings And Characteristics: (25°C ambient temperature unless stated otherwise.)

HVGT Part Number	V_{RRM} kV	I_{FAVM1} mA	I_{FAVM2} mA	V_F V	I_R uA	I_{FSM} A	T_{RR} nS	C_J pF	$R_{\theta JL}$ °C/W
SMU0405JS	5.0	40	20	14.0	0.5	3.0	60	1.0	55
SMU0405GS	5.0	40	20	14.0	0.5	3.0	60	1.0	55

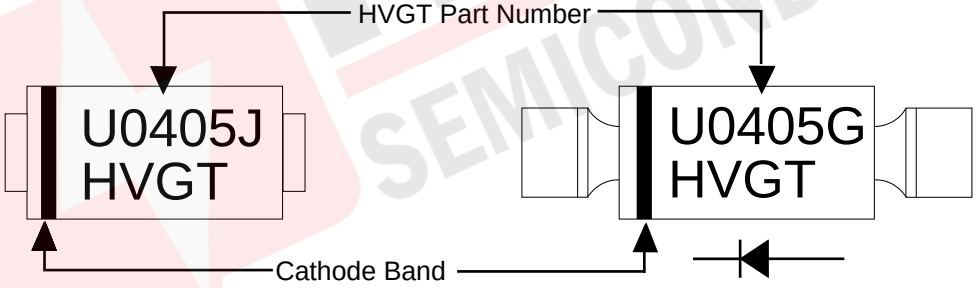
Temperature:

Storage Temperature -55 to 175 °C
Operating Temperature -55 to 150 °C
Maximum Junction Temperature 150 °C

Specification Definitions:

Symbols	Items	Condition
V_{RRM}	Maximum Repetitive Reverse Voltage	--
I_{FAVM1}	Maximum Average Forward Current	At T_L = 55°C
I_{FAVM2}	Maximum Average Forward Current	At T_L = 100°C
V_F	Maximum Forward Voltage Drop	At 100mA
I_R	Maximum Leakage Current	At V_{RRM}
I_{FSM}	Maximum Surge Current	At 8.3 mS, 1/2 Sine(60Hz),@ 25°C
T_{RR}	Maximum Reverse Recovery Time	I_F= 0.5 I_{FAVM} ; I_R = -I_{FAVM} ; I_{RR} = -0.25 I_{FAVM}
C_J	Typical Junction Capacitance	At V_R = 0VDC, f = 1MHz
$R_{\theta JL}$	Typical Thermal Resistance Junction to Lead	Device Mounted on 0.2" x 0.2" (5mm x 5mm) Copper Solder Pads

Marking:



Part number			SMU0405JS	SMU0405GS
Marking			U0405J HVGT	U0405G HVGT

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FIGURE 01 Reverse Recovery Measurement Waveform

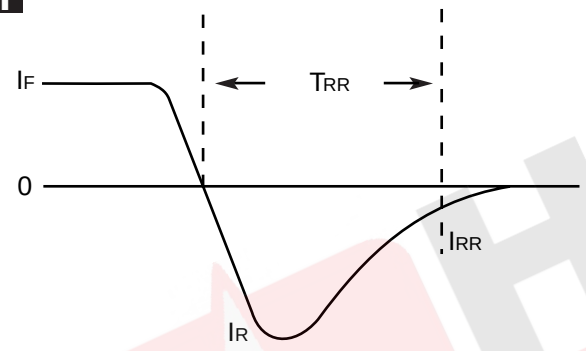


FIGURE 02 Forward Current Derating Curve

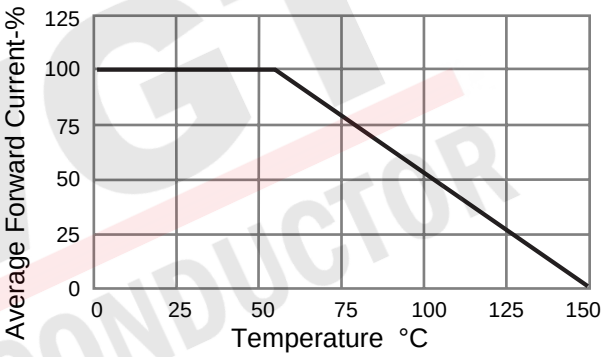


FIGURE 03 Positive Characteristic Curve

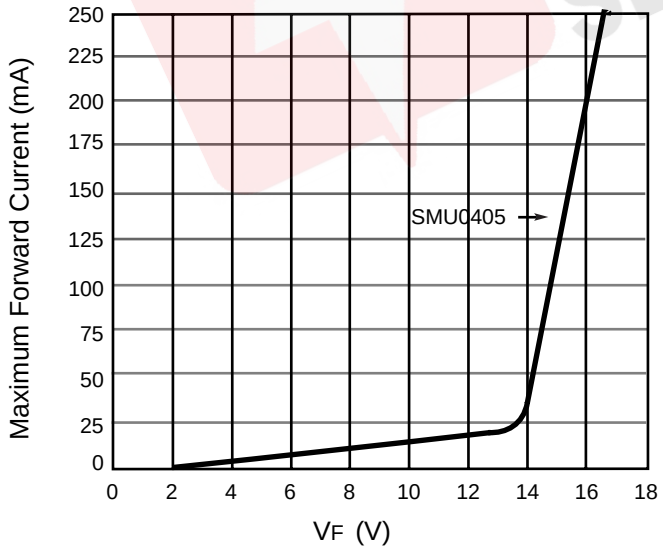


FIGURE 04 Reverse Leakage Current Curve With Voltage Variation

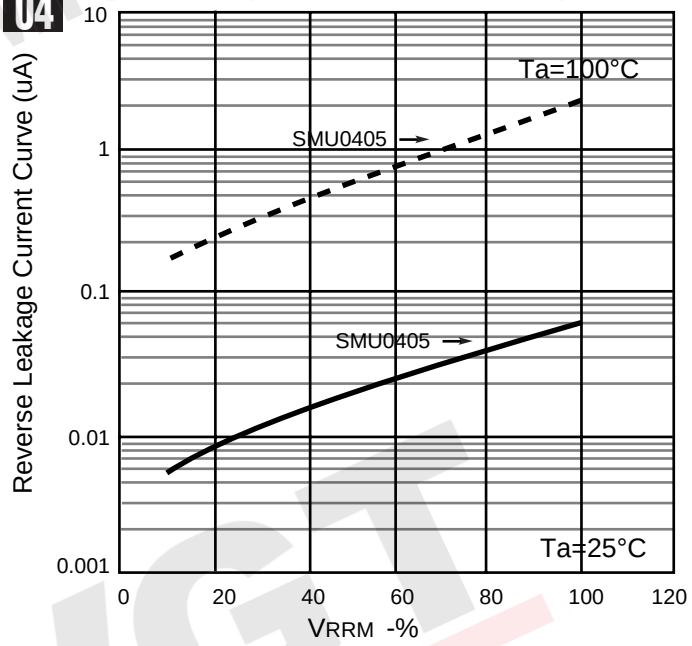
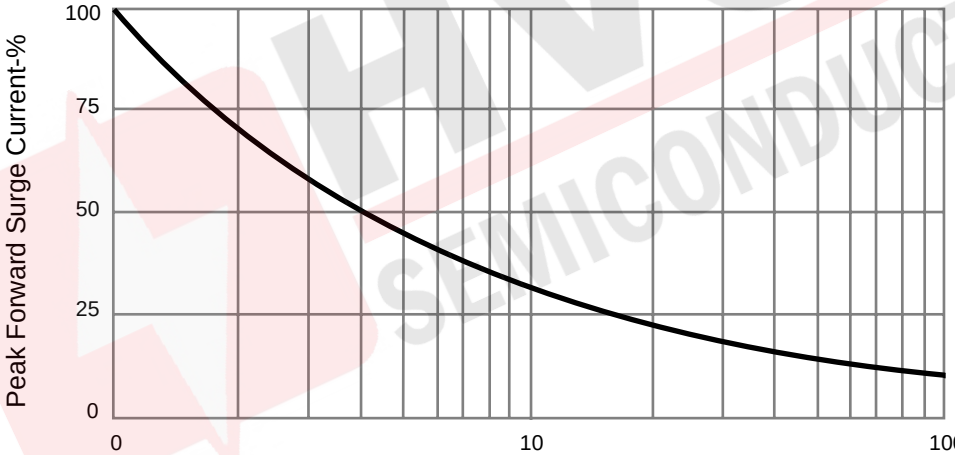


FIGURE 05 Repetitive Surge Current Derating Curve



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

Notes:

Specifications subject to change without notice. Photo is representation only.

Standard package quantity:2,000PCS

pecifications based on diode P.C.B. mounted on 5.0 mm x 5.0 mm copper solder pads.