

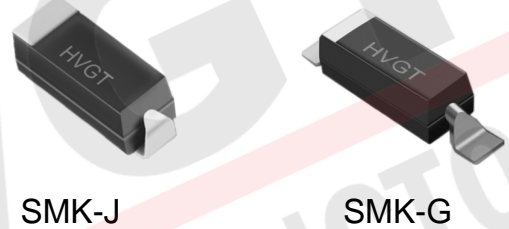
Features:

Surface Mount Package.
 J Lead or Gullwing Package Option.
 Molded Plastic Body, ANSI/UL94 V-0 Rated Material.

Application:

X-ray Power Supply.
 High Voltage Multiplier Circuit.
 Other High Voltage Rectifier Circuits.

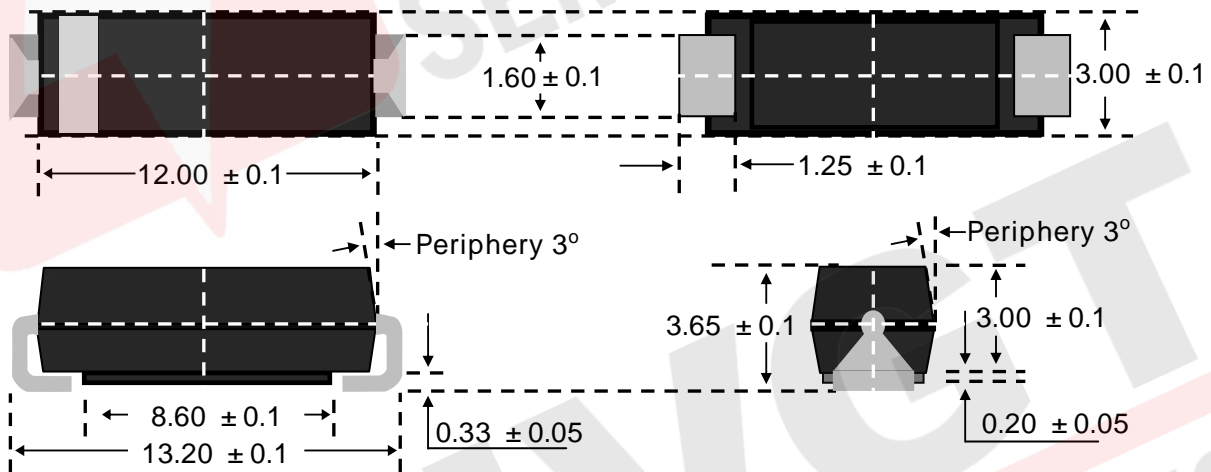
Reference Shape:



Drawings: (Unit:mm)

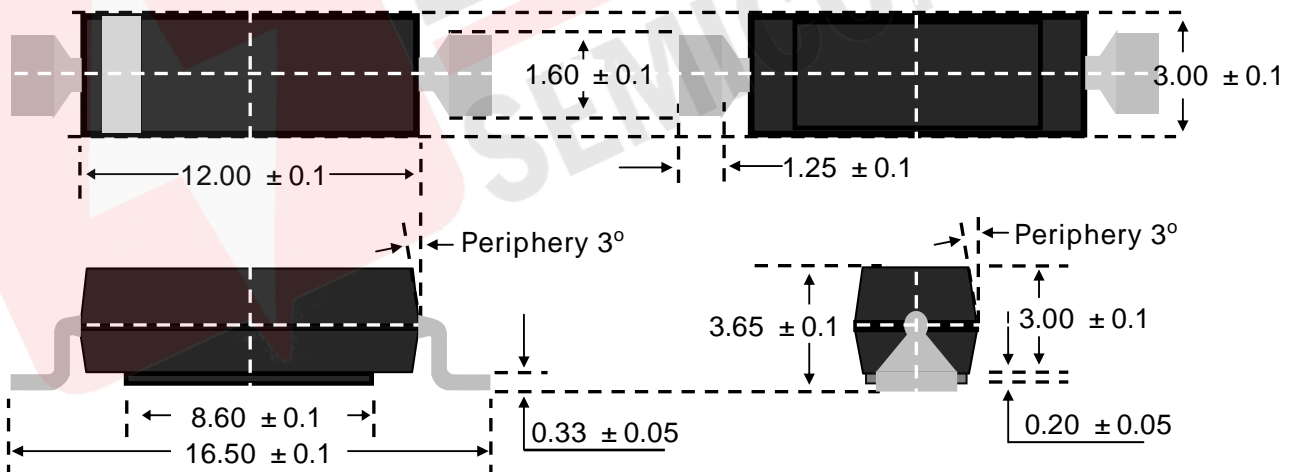
SMK-J Series

SMK-J Lead



SMK-G Series

SMK-G Lead



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

HVGT Part Number	V _{RRM} kV	I _{FAVM} mA	V _F V	I _R uA	I _{FSM} A	T _{RR} nS	C _J pF	R _{JL} °C/W	R _{JC} °C/W
SMK-J Series									
SM03L05J	5.0	130	15.6	0.5	5.0	100	2.0	50	55
SM03L06J	6.0	120	18.8	0.5	5.0	100	1.6	50	55
SM03L08J	8.0	110	21.8	0.5	5.0	100	1.2	50	55
SM03L10J	10.0	100	25.2	0.5	5.0	100	1.1	50	55
SM03L12J	12.0	80	27.5	0.5	5.0	100	0.9	50	55
SM03L15J	15.0	70	35.0	0.5	5.0	100	0.9	50	55
SM03L20J	20.0	60	40.0	0.5	5.0	100	0.6	50	55
SM03L25J	25.0	50	45.0	0.5	5.0	100	0.5	50	55
SM03L30J	30.0	40	55.0	0.5	5.0	100	0.4	50	55
SMK-G Series									
SM03L05G	5.0	130	15.6	0.5	5.0	100	2.0	50	55
SM03L06G	6.0	120	18.8	0.5	5.0	100	1.6	50	55
SM03L08G	8.0	110	21.8	0.5	5.0	100	1.2	50	55
SM03L10G	10.0	100	25.2	0.5	5.0	100	1.1	50	55
SM03L12G	12.0	80	27.5	0.5	5.0	100	0.9	50	55
SM03L15G	15.0	70	35.0	0.5	5.0	100	0.9	50	55
SM03L20G	20.0	60	40.0	0.5	5.0	100	0.6	50	55
SM03L25G	25.0	50	45.0	0.5	5.0	100	0.5	50	55
SM03L30G	30.0	40	55.0	0.5	5.0	100	0.4	50	55

Temperature:

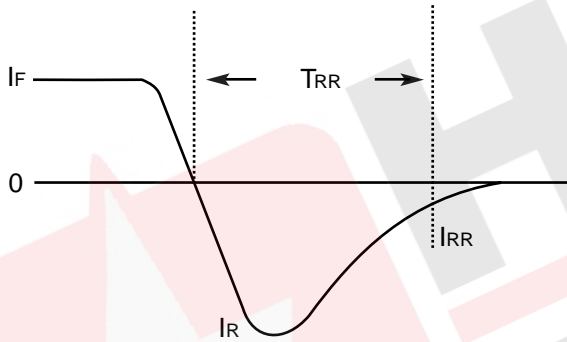
Storage Temperature -55 to 175 °C
 Operating Temperature -55 to 125 °C
 Maximum Junction Temperature 125 °C

Specification Definitions:

Symbols	Items	Condition
V _{RRM}	Maximum Repetitive Reverse Voltage	--
I _{FAVM}	Maximum Average Forward Current	At T _L = 55°C
V _F	Maximum Forward Voltage Drop	At I _{FAVM}
I _R	Maximum Leakage Current	At V _{RRM}
I _{FSM}	Maximum Surge Current	At 8.3 mS, Single Half Sine
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 _{JL}	Typical Thermal Resistance Junction to Lead	Device Mounted on 0.2" x 0.2" (5mm x 5mm) Copper Solder Pads
R _{JC}	Typical Thermal Resistance Junction to Case	

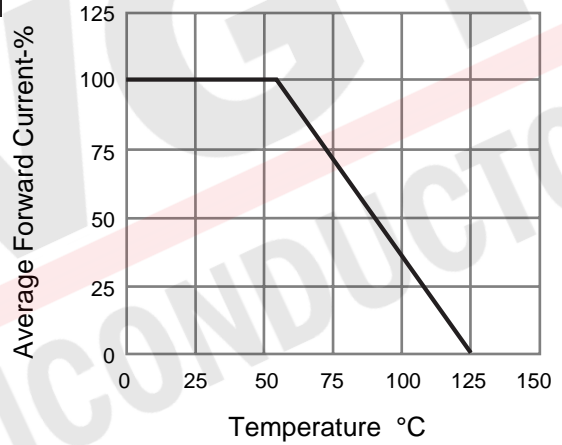
Curves Diagram:

FIGURE 01 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 ($I_{F(AV)}$) of the D.U.T.

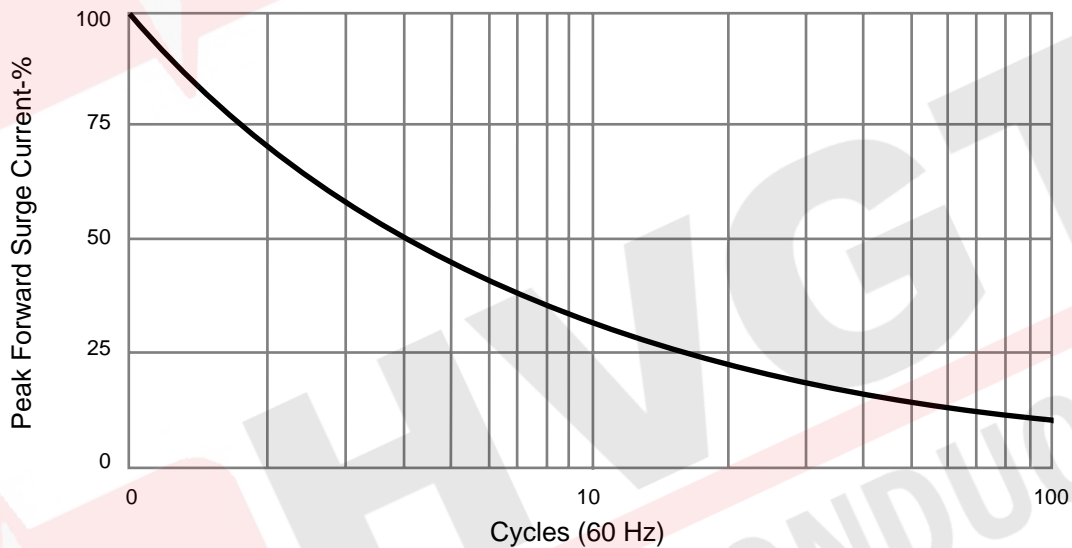
FIGURE 02 Forward Current Derating Curve



This applies to most diodes in our catalog that show average current rating at 55°C unless otherwise specified.

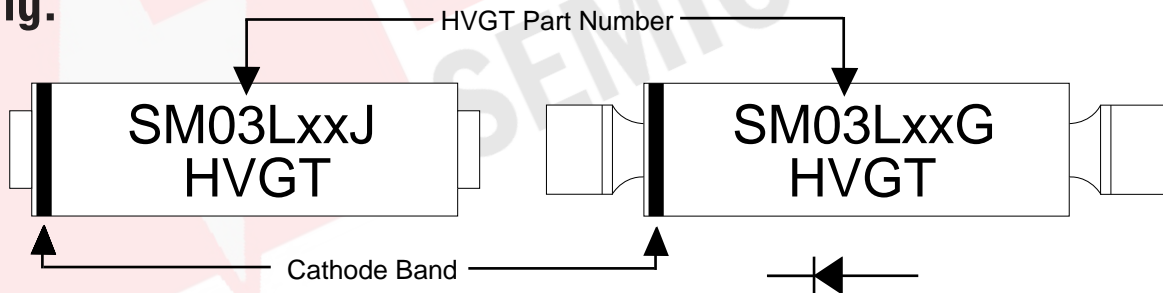
Max operating temperature is 150°C unless otherwise specified.

FIGURE 03 Repetitive Surge Current Derating Curve



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

Marking:



Note: Specifications subject to change without notice. Photo is representation only.
 Standard package quantity: 1,000PCS
 Specifications based on diode P.C.B. mounted on 5.0 mm x 5.0 mm copper solder pads.