Surface Mount High Voltage Diodes

EM0520 EM0525 EM0530 EM0535 EM0540

500mA --nS Series: 2.0kV 2.5kV 3.0kV 3.5kV 4.0kV

INTRODUCE:

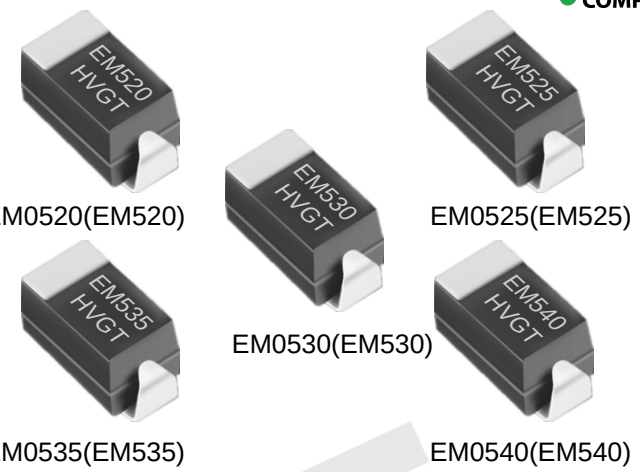
HVGT brand high voltage silicon rectifier diodes is made of high quality silicon wafer chip an and high reliability epoxy resin sealing structure,and through professional testing equipment inspection qualified after to customers.

FEATURES:

1.Deally Suited for Automatic Assembly.
2.Low Forward Voltage Drop.
3.Surge Overload Rating to 30A Peak.
4.Low Power Loss.
5.Built-in Strain Relief.
6.Plastic Case Material has UL Flammability.
7.Classification Rating 94V-O.

REFERENCE SHAPE:

RoHS COMPLIANT



EM0520(EM520) EM0525(EM525)

EM0530(EM530)

EM0535(EM535) EM0540(EM540)

APPLICATIONS:

1. Electronic mosquito killer.
2. General purpose high voltage rectifier.
3. X-ray voltage doubling circuit.
4. Negative ion high-voltage generator.

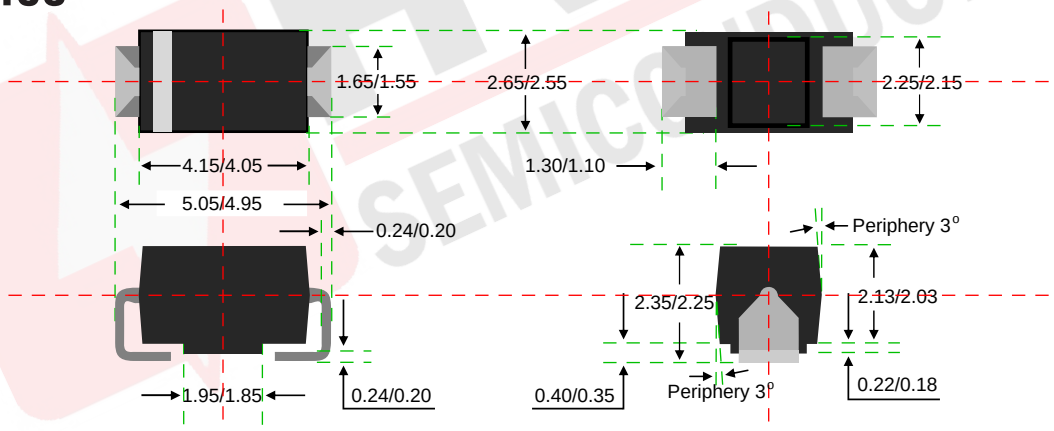
MECHANICAL DATA:

1.Case: Epoxy resin molding.
2.Terminal: Surface mount welding.
3.Marking: Type number and cathode Band.
4.Net weight: 0.064 grams (approx).

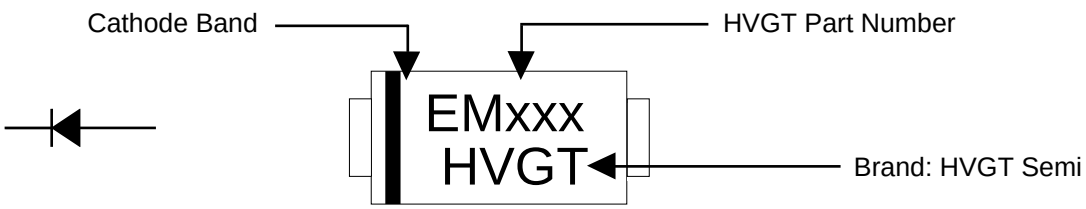
DRAWINGS: (Unit:mm , Value: Max / Min)

SMA-Series

SMA-J Lead



MARKING:



Part number	EM0520	EM0525	EM0530	EM0535	EM0540
Marking	EM520 HVGT	EM525 HVGT	EM530 HVGT	EM535 HVGT	EM540 HVGT

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

Characteristics and Conditions	Symbols	HVGT Part					Units
		EM0520	EM0525	EM0530	EM0535	EM0540	
Max. Repetitive Reverse Voltage Max. Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	2000	2500	3000	3500	4000	V
RMS Reverse Voltage	$V_{R(RMS)}$	1400		2100		2800	
Maximum Forward Voltage Drop @ I_F =0.5A	V_{FM}	2.0		3.0		4.0	
Average Rectified Output Current @ T_L=55° C	I_O	0.5					A
Maximum Surge Current @ 8.3 mS, Single Half Sine, 60Hz	I_{FSM}	30					
Max. Leakage Current @ V_{RRM} T_A =25° C T_A =100° C	I_{R1} I_{R2}	5.0 50					uA
Typical Junction Capacitance @ V_R = 4VDC, f = 1MHz	C_J	--					pF
Maximum Reverse Recovery Time I_F =100mA; I_R =200mA; I_{RR} = 50mA	T_{RR}	--					nS
Typical Thermal Resistance Mounted on P.C. Board with 8.0mm land area	$R_{\theta JL}$	50					° C/W
Maximum Junction Temperature	T_J	150					° C
Operating Temperature	T_C	-40~150					
Storage Temperature	T_{STG}	-55~175					

Notes:
Specifications subject to change without notice. Photo is representation only.
Standard package quantity:5,000PCS or 10,000PCS.
Pecifications based on diode P.C.B. mounted on 5.0 mm x 5.0 mm copper solder pads.

GETE ELECTRONIC CO.,LTD Http://www.getedz.com Http://www.hvgtsemi.com E-mai: sales@getedz.com
GETAI ELECTRONIC DEVICE CO.,LTD TEL:0086-20-8184 9628 FAX:0086-20-8184 9638

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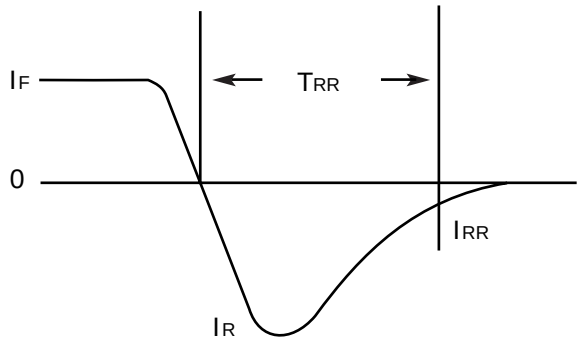
FIGURE 01 Reverse Recovery Measurement Waveform



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_{FAVM}) of the D.U.T

FIGURE 02 Forward Current Derating Curve

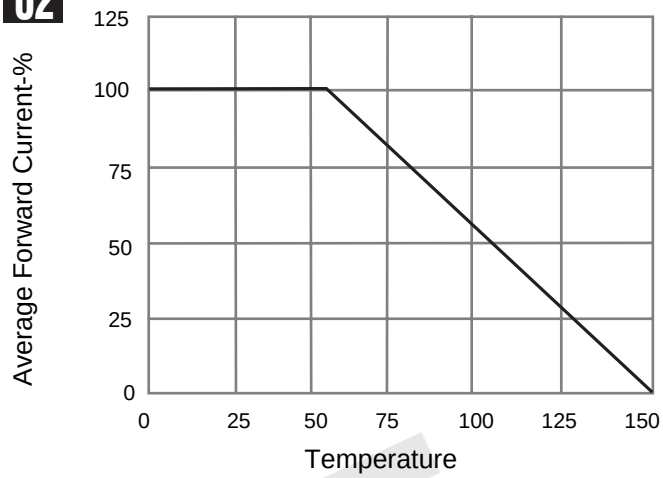


FIGURE 03 Typical Forward Characteristics

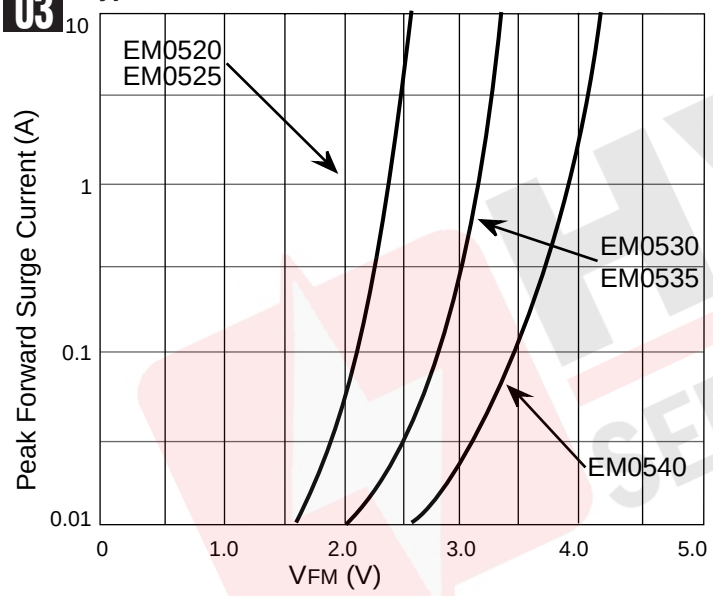


FIGURE 04 Typical Reverse Characteristics

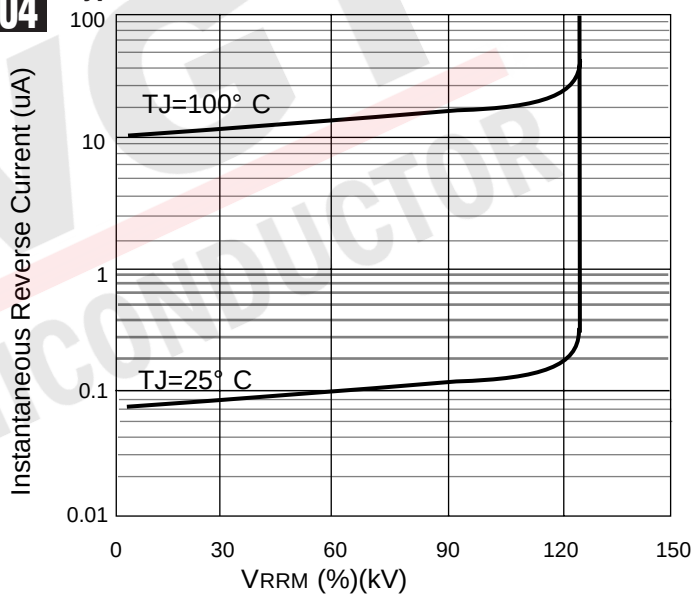
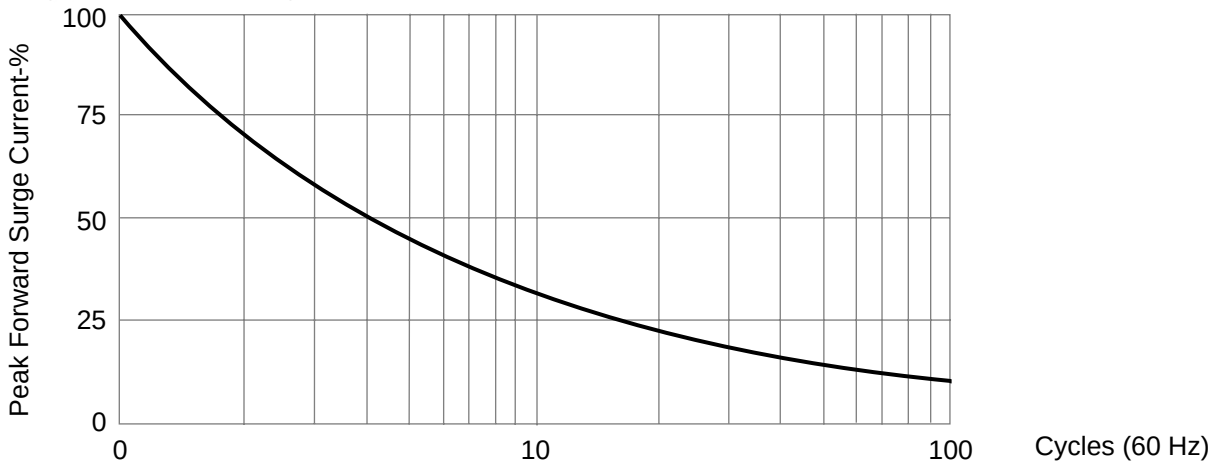


FIGURE 05 Repetitive Surge Current Derating Curve



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