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## Vishay General Semiconductor

<b>ELECTRICAL CHARACTERISTICS</b> ( $T_A = 25 \text{ °C}$ unless otherwise noted)						
PARAMETER	TEST CONDITIONS		SYMBOL	TYP.	MAX.	UNIT
Instantaneous forward voltage per diode	I <sub>F</sub> = 3 A	T <sub>A</sub> = 25 °C	V <sub>F</sub> <sup>(1)</sup>	0.65	0.74	V
Instantaneous forward voltage per diode	$I_F = 5 A$	T <sub>A</sub> = 125 °C	VF	0.56	0.65	v
Reverse current per diode	V <sub>R</sub> = 100 V	T <sub>A</sub> = 25 °C	I <sub>R</sub> <sup>(2)</sup>	-	150	μA
		T <sub>A</sub> = 125 °C		2	6	mA

### Notes

 $^{(1)}\,$  Pulse test: 300  $\mu s$  pulse width, 1 % duty cycle

<sup>(2)</sup> Pulse test: Pulse width  $\leq$  5 ms

THERMAL CHARACTERISTICS	<b>IERMAL CHARACTERISTICS</b> (T <sub>A</sub> = 25 °C unless otherwise noted)				
PARAMETER		SYMBOL	V6WM100C	UNIT	
	per diode	R <sub>θJC</sub>	3.8	°C/W	
Typical thermal resistance	per device		1.9		
	per device	R <sub>0JA</sub> <sup>(1) (2)</sup>	65		

#### Notes

 $^{(1)}$  The heat generated must be less than the thermal conductivity from junction-to-ambient:  $dP_D/dT_J < 1/R_{0JA}$ 

<sup>(2)</sup> Free air, without heatsink

ORDERING INFORMATION (Example)						
PREFERRED P/N	UNIT WEIGHT (g)	PACKAGE CODE	BASE QUANTITY	DELIVERY MODE		
V6WM100C-M3/I	0.38	l	2500/reel	13" diameter plastic tape and reel		

### RATINGS AND CHARACTERISTICS CURVES (T<sub>A</sub> = 25 °C unless otherwise noted)

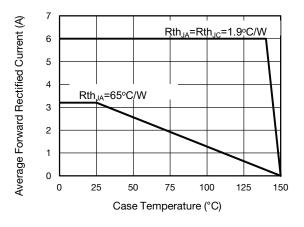


Fig. 1 - Maximum Forward Current Derating Curve

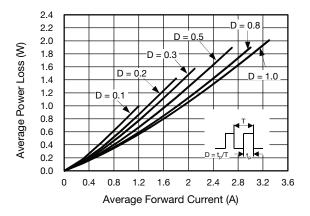
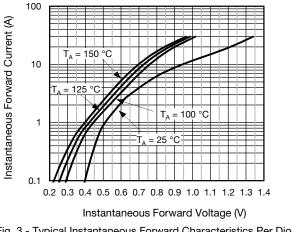


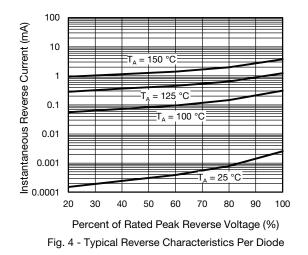
Fig. 2 - Forward Power Loss Characteristics Per Diode

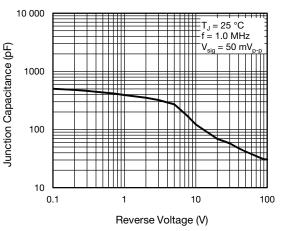
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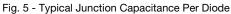


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Fig. 3 - Typical Instantaneous Forward Characteristics Per Diode







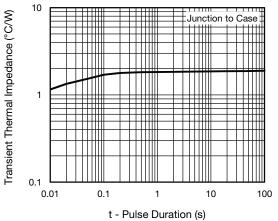


Fig. 6 - Typical Transient Thermal Impedance Per Device

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0.256 (6.5) MIN.

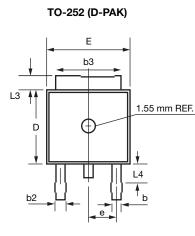
> 0.094 (2.4) MIN.

0.051 (1.3) MIN.

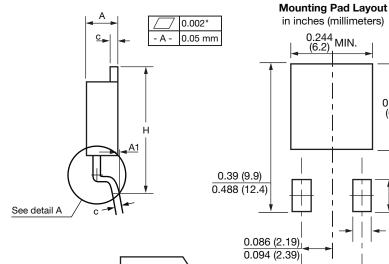


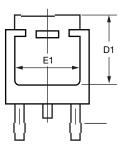
### **PACKAGE OUTLINE DIMENSIONS** in inches (millimeters)

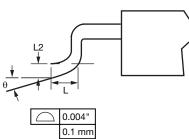
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SYMBOL	INC	HES	MILLIMETERS			
	MIN.	MAX.	MIN.	MAX.		
A	0.086	0.094	2.19	2.38		
A1	-	0.005	-	0.13		
b	0.025	0.035	0.64	0.89		
b2	0.033	0.045	0.84	1.14		
b3	0.205	0.215	5.21	5.46		
с	0.018	0.024	0.46	0.61		
D	0.235	0.250	5.97	6.22		
D1	0.205	-	5.21	-		
E	0.250	0.265	6.35	6.73		
E1	0.190	-	4.83	-		
е	0.090	0.090 BSC.		2.29 BSC.		
Н	0.380	0.410	9.65	10.41		
L	0.055	0.070	1.40	1.78		
L2	0.020	BSC.	0.51 BSC.			
L3	0.035	0.050	0.89	1.27		
L4	0.025	0.039	0.64	1.01		
θ	0°	8°	0°	8°		

#### Note

• Conforms to JEDEC TO-252 variation AA except dimension "D"

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