

Vishay General Semiconductor

ADDITIONAL CHARACTERISTICS (T _C = 25 °C unless otherwise noted)										
PARAMETER	TEST CONDITIONS	SYMBOL	MIN.	TYP.	MAX.	UNIT				
Zener voltage temperature coefficient	I _Z = 10 mA	V_{ZTC}	-	-	36	mV/°C				
Clamping voltage for 10 µs/10 ms exponentially decaying waveform	I _{PP} = 75 A	V _C	-	-	40.0	V				
Instantaneous forward voltage	$I_F = 6.0 \text{ A}$	V _F ⁽¹⁾	-	-	0.98	V				
Instantaneous forward voltage	I _F = 100 A		-	0.93	-					
Reverse leakage current	Pated V	- I _R	ı	-	1.0	- μΑ				
	Rated V_{WM} $T_J = 175 °C$		-	-	50.0					

Note

 $^{^{(1)}}$ Measured on a 300 μs square pulse width

THERMAL CHARACTERISTICS (T _C = 25 °C unless otherwise noted)						
PARAMETER		VALUE	UNIT			
Typical thermal resistance, junction to case		0.90	°C/W			

ORDERING INFORMATION (Example)							
PREFERRED P/N	UNIT WEIGHT (g)	PREFERRED PACKAGE CODE	BASE QUANTITY	DELIVERY MODE			
SM8A27HE3/2D ⁽¹⁾	2.605	2D	750	13" diameter plastic tape and reel, anode towards the sprocket hole			

Note

RATINGS AND CHARACTERISTICS CURVES ($T_A = 25$ °C unless otherwise noted)

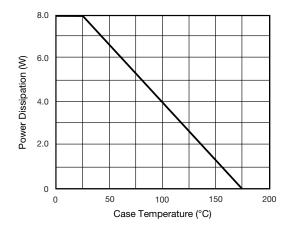


Fig. 1 - Power Derating Curve

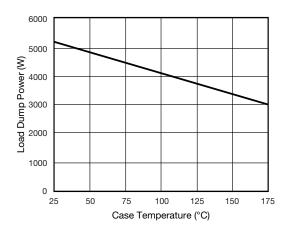


Fig. 2 - Load Dump Power Characteristics (10 ms Exponential Waveform)

⁽¹⁾ AEC-Q101 qualified



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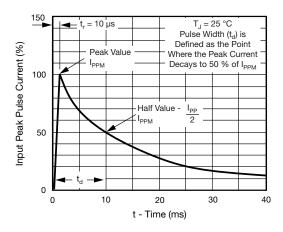


Fig. 3 - Pulse Waveform

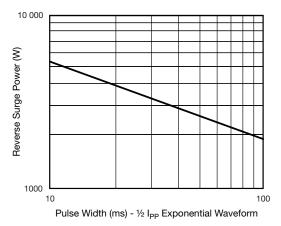


Fig. 4 - Reverse Power Capability

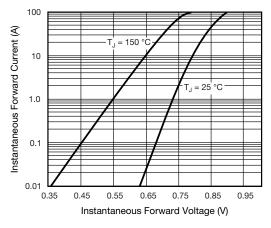


Fig. 5 - Typical Instantaneous Forward Characteristics

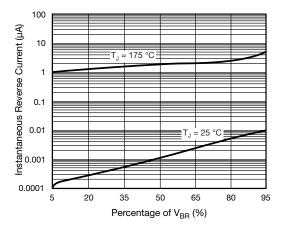


Fig. 6 - Typical Reverse Characteristics

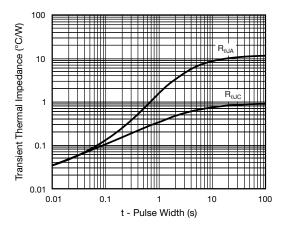
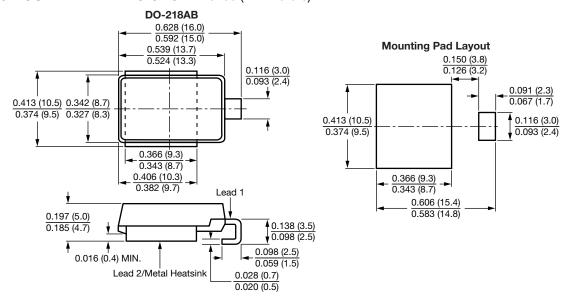


Fig. 7 - Typical Transient Thermal Impedance



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PACKAGE OUTLINE DIMENSIONS in inches (millimeters)





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Vishay: SM8A27HE3/2D