

ELECTRICAL CHARACTERISTICS (T <sub>A</sub> = 25 °C unless otherwise noted)						
PARAMETER	TEST CONDITIONS		SYMBOL	TYP.	MAX.	UNIT
Instantaneous forward voltage	I <sub>F</sub> = 2.0 A	T <sub>A</sub> = 25 °C	V <sub>F</sub> <sup>(1)</sup>	0.61	0.70	V
		T <sub>A</sub> = 125 °C		0.56	0.65	
Reverse current	V <sub>R</sub> = 70 V	T <sub>A</sub> = 25 °C	I <sub>R</sub> <sup>(2)</sup>	1.0	-	μA
		T <sub>A</sub> = 125 °C		0.95	-	mA
	V <sub>R</sub> = 100 V	T <sub>A</sub> = 25 °C		3.5	150	μA
		T <sub>A</sub> = 125 °C		2.2	15	mA
Typical junction capacitance	4.0 V, 1 MHz		C <sub>J</sub>	175	-	pF

**Notes**

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

(2) Pulse test: Pulse width  $\leq 40\text{ ms}$

<b>THERMAL CHARACTERISTICS</b> ( $T_A = 25\text{ }^{\circ}\text{C}$ unless otherwise noted)			
PARAMETER	SYMBOL	VSSA210	UNIT
Typical thermal resistance	$R_{\theta JA}^{(1)}$	135	$^{\circ}\text{C/W}$
	$R_{\theta JM}^{(2)}$	25	

**Notes**

(1) Free air, mounted on recommended PCB 1 oz. pad area; thermal resistance  $R_{\theta JA}$  - junction to ambient

(2) Units mounted on PCB with 8 mm x 8 mm copper pad areas;  $R_{\theta JM}$  - junction to mount

<b>ORDERING INFORMATION</b> (Example)				
PREFERRED P/N	UNIT WEIGHT (g)	PREFERRED PACKAGE CODE	BASE QUANTITY	DELIVERY MODE
VSSA210-M3/61T	0.064	61T	1800	7" diameter plastic tape and reel
VSSA210-M3/5AT	0.064	5AT	7500	13" diameter plastic tape and reel
VSSA210HM3/61T <sup>(1)</sup>	0.064	61T	1800	7" diameter plastic tape and reel
VSSA210HM3/5AT <sup>(1)</sup>	0.064	5AT	7500	13" diameter plastic tape and reel
VSSA210HM3_A/H <sup>(1)</sup>	0.064	H	1800	7" diameter plastic tape and reel
VSSA210HM3_A/I <sup>(1)</sup>	0.064	I	7500	13" diameter plastic tape and reel

**Note**

(1) AEC-Q101 qualified

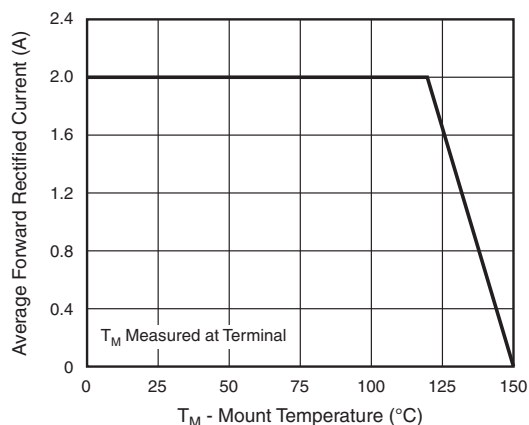
**RATINGS AND CHARACTERISTICS CURVES** ( $T_A = 25\text{ }^{\circ}\text{C}$  unless otherwise noted)


Fig. 1 - Maximum Forward Current Derating Curve

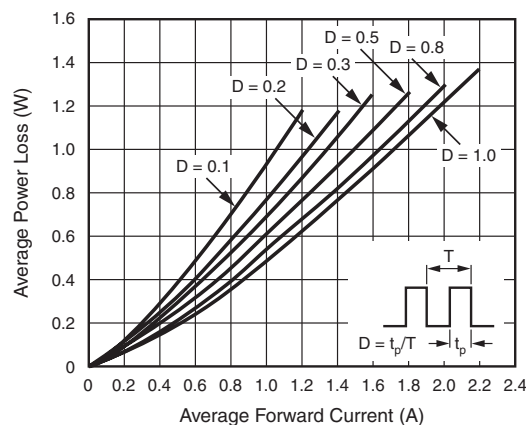


Fig. 2 - Forward Power Loss Characteristics

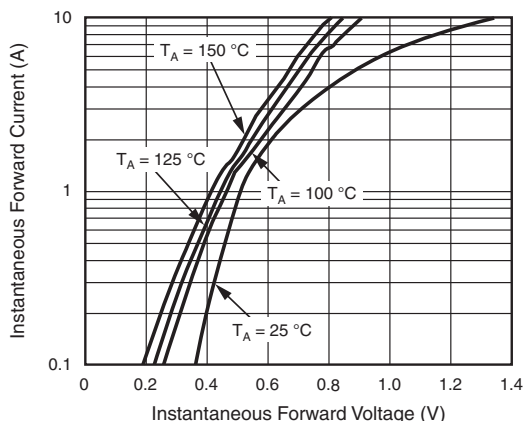


Fig. 3 - Typical Instantaneous Forward Characteristics

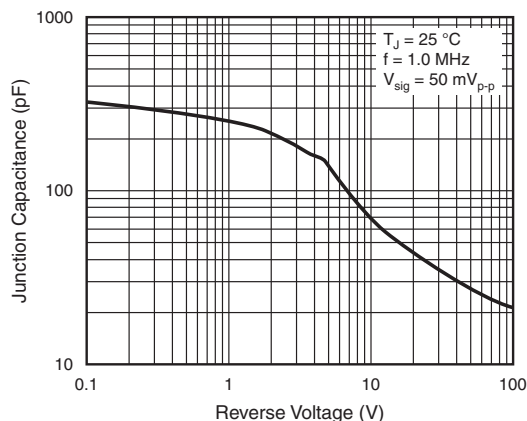


Fig. 5 - Typical Junction Capacitance

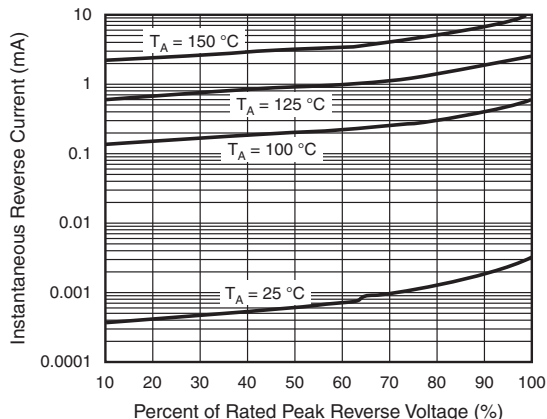


Fig. 4 - Typical Reverse Characteristics

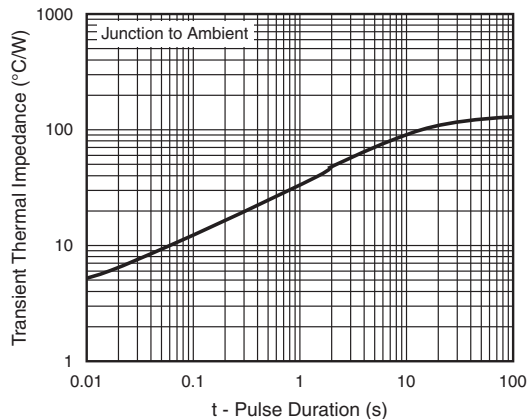
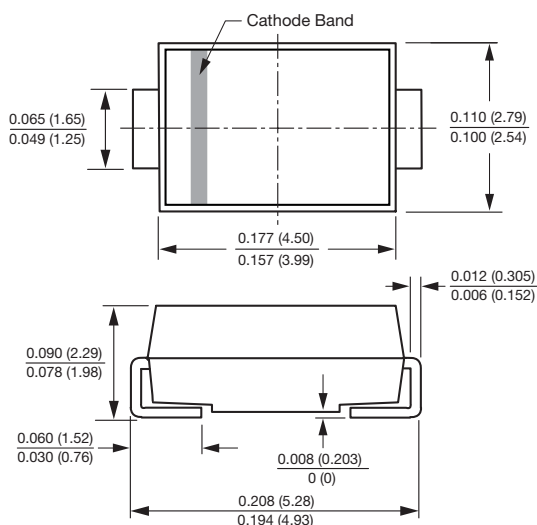
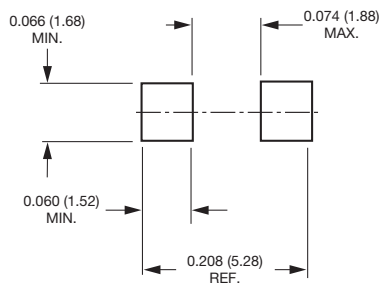


Fig. 6 - Typical Transient Thermal Impedance

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

**DO-214AC (SMA)**

**Mounting Pad Layout**




## Disclaimer

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