

# SMC5365A - SMC5367A

# SURFACE MOUNT SILICON ZENER DIODES

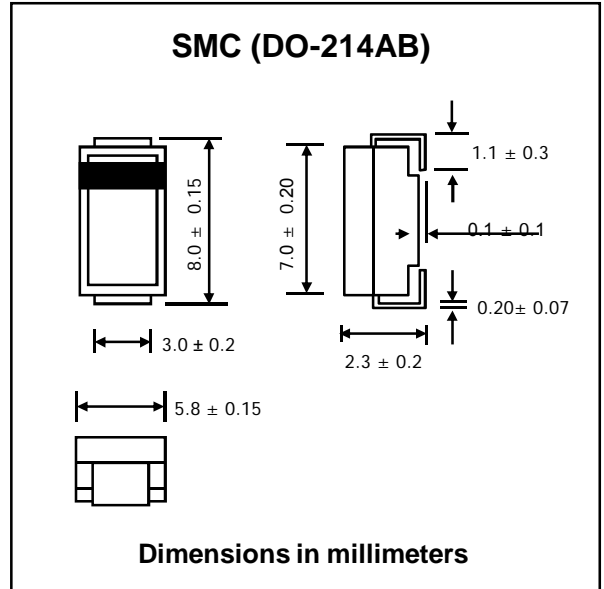
**V<sub>Z</sub> : 36 - 43 Volts**  
**P<sub>D</sub> : 5 Watts**

**FEATURES :**

- \* Complete Voltage Range 36 to 43 Volts
- \* High peak reverse power dissipation
- \* High reliability
- \* Low leakage current
- \* Pb / RoHS Free

**MECHANICAL DATA :**

- \* Case : SMC Molded plastic
- \* Epoxy : UL94V-O rate flame retardant
- \* Lead : Lead Formed for Surface Mount
- \* Polarity : Color band denotes cathode end
- \* Mounting position : Any
- \* Weight : 0.21 gram



**MAXIMUM RATINGS**

Rating at 25 °C ambient temperature unless otherwise specified

Rating	Symbol	Value	Unit
Power Dissipation at T <sub>L</sub> = 25 °C	P <sub>D</sub>	5	W
Maximum Forward Voltage at I <sub>F</sub> = 1.0 A	V <sub>F</sub>	1.2	V
Thermal Resistance, Junction to Ambient (Note 1)	R <sub>θJA</sub>	90	°C/W
Thermal Resistance, Junction to Lead (Note 1)	R <sub>θJL</sub>	25	°C/W
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	- 65 to + 150	°C

**Note :**

- (1) When mounted on FR4 PC board (1 oz Cu) with recommended footprint.

**ELECTRICAL CHARACTERISTICS** (Rating at 25 °C ambient temperature unless otherwise specified)

TYPE	Regulator Voltage		Maximum Zener Impedance			Maximum Reverse Leakage Current		Maximum Zener Current	Maximum Surge Current	Maximum Voltage
	V <sub>Z</sub> @ I <sub>ZT</sub>	I <sub>ZT</sub>	Z <sub>ZT</sub> @ I <sub>ZT</sub>	Z <sub>ZK</sub> @ I <sub>ZK</sub>	I <sub>ZK</sub>	I <sub>R</sub> @ V <sub>R</sub>		I <sub>ZM</sub>	I <sub>ZSM</sub>	Regulator
	(V)	(mA)	(Ω)	(Ω)	(mA)	(μA)	(V)	(mA)	(A)	ΔV <sub>Z</sub>
SMC5365A	36	30	11	160	1.0	0.5	25.9	132	3.3	0.65
SMC5366A	39	30	14	170	1.0	0.5	28.1	122	3.1	0.65
SMC5367A	43	30	20	190	1.0	0.5	31.0	110	2.8	0.70

**Notes :**

- (1) Suffix " A " indicates ± 10% tolerance, suffix " B " indicates ± 5% tolerance.
- (2) The surge current (I<sub>ZSM</sub>) is specified as the maximum peak of a non- recurrent half-sin wave of 8.3 ms duration.
- (3) Voltage regulation (V<sub>Z</sub>) is the difference between the voltage measured at 10% and 50% of I<sub>ZM</sub>