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# Notification Letter of datasheet optimization for DO-214AA & DO-214AB & DO-214AC & SOD-123FL package, SZSMxx TVS AUTO products

To Our Valued Customers,

Littelfuse would like to notify you datasheet optimization for DO-214AA & DO-214AB & DO-214AC & SOD-123FL package, SZ1SMC/SZ1.5SMC & SZ1SMB/SZP6SMB & SZ1SMA & SZSMF series, TVS AUTO products. **TJ & Tstg are improved to 175°**C based on products actual capacity. Related thermal characteristics will be updated accordingly. There is no any change to product itself.

## 1. SZ1SMC/SZ1.5SMC series electrical characteristics optimize:

Parameter	Symbol	Value Before	Value After	Unit
Operating and Storage Temperature Range	T <sub>J</sub> & T <sub>STG</sub>	-65 to 150 °C	-65 to 175	°C
DC Power Dissipation @ T <sub>A</sub> = 25°C	P <sub>D</sub>	0.75	2.0	W
Derate Above 25°C		6.1	13.3	mW/°C
Thermal Resistance from Junction–to–Ambient	R <sub>OJA</sub>	165	75	°C/W
DC Power Dissipation @ T <sub>L</sub> = 75°C Measured Zero Lead Length	P <sub>D</sub>	4.0	5.4	W

# 2. SZ1SMB/SZP6SMB series electrical characteristics optimize:

Parameter	Symbol	Value Before	Value After	Unit
Operating and Storage Temperature Range	T <sub>J</sub> & T <sub>STG</sub>	-65 to 150 °C	-65 to 175	°C
DC Power Dissipation @ T <sub>A</sub> = 25°C	P <sub>D</sub>	0.55	1.5	W
Derate Above 25°C		4.4	10.0	mW/°C
Thermal Resistance from Junction–to–Ambient	R <sub>OJA</sub>	226	100	°C/W
DC Power Dissipation @ T <sub>L</sub> = 75°C Measured Zero Lead Length	P <sub>D</sub>	3.0	4.0	W

#### 3. SZ1SMA series electrical characteristics optimize:

Parameter	Symbol	Value Before	Value After	Unit
Operating and Storage Temperature Range	T <sub>J</sub> & T <sub>STG</sub>	-65 to 150 °C	-65 to 175	°C
DC Power Dissipation @ T <sub>A</sub> = 25°C	P <sub>D</sub>	0.5	1.2	W
Derate Above 25°C		4.0	8.3	mW/°C
Thermal Resistance from Junction–to–Ambient	R <sub>OJA</sub>	250	120	°C/W
DC Power Dissipation @ T <sub>L</sub> = 75°C Measured Zero Lead Length	P <sub>D</sub>	1.5	2.0	W



## 4. SZSMF series electrical characteristics optimize:

Parameter	Symbol	Value Before	Value After	Unit
Operating and Storage Temperature Range	T <sub>J</sub> & T <sub>STG</sub>	-55 to 150 °C	-55 to 175	°C
DC Power Dissipation @ T <sub>A</sub> = 25°C	$P_D$	0.385	1.0	W
Derate Above 25°C		4.0	6.6	mW/°C
Thermal Resistance from Junction–to–Ambient	$R_{\Theta JA}$	325	150	°C/W

The updated datasheet will be completely uploaded to website in Jan 2024. There will be no change to the form, fit, function, quality, or reliability of the products.

Please refer to the attached list for affected part numbers.

Form, fit, function changes: None Part number changes: None Effective date: Dec 29, 2023 Replacement products: None

Last time buy: None

This notification is for your information and acknowledgement. If you have any other questions or concerns, please contact your local sales team or product team below for further assistance.

We value your business and look forward to assisting you whenever possible.

Best Regards,

Victoria You Assistant Product Manager TVS AUTO