



Features

- Small Package outline
- Fast reverse recovery time for high efficiency
- Molded plastic body, ANSI/UL94 V-0 rated material
- RoHS compliant to Directive 2011/65/EC, Article 4(1), Annex II, Annex III, 7(a) and EU RoHS Directive (EU) 2015/863 of March 2015, Amending Annex II.



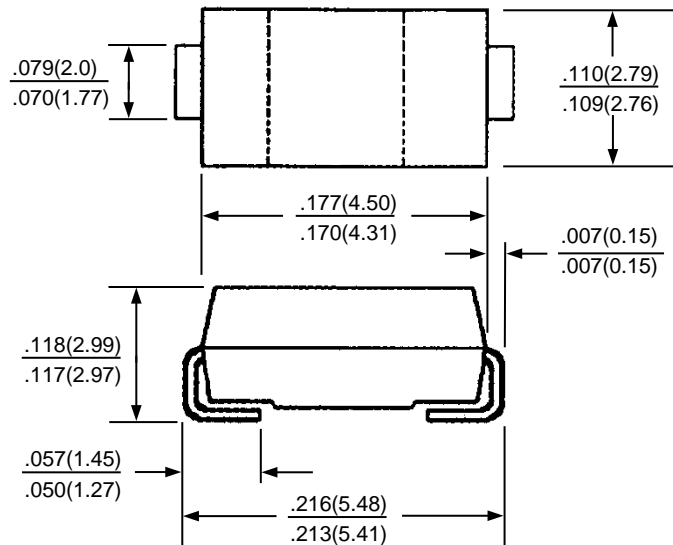
DEVICE ELECTRICAL CHARACTERISTICS
(25°C ambient temp unless stated otherwise)

	Conditions	Symbol	SP3A	SP3L	SP3S	SP5L	SP5LF	SP5S	SP8L	SP8S
Repetitive Peak Reverse Voltage		V_{RRM}	3kV	3kV	3kV	5kV	5kV	5kV	8kV	8kV
Average Forward Current Max.	$T_L = 55^\circ\text{C}$	I_{FAVM}	750mA	450mA	120mA	270mA	270mA	40mA	100mA	40mA
Average Forward Current Max.	$T_L = 100^\circ\text{C}$	I_{FAVM}	200mA	110mA	50mA	140mA	140mA	20mA	40mA	20mA
Maximum Forward Voltage Drop	$I_F = 100\text{mA}$	V_F	3.2V	3.6V	3.9V	8.5V	7.6V	14.0V	18.0V	18.0V
Typical Junction Capacitance	$f=1\text{MHz}, V_R=0\text{VDC}$	C_J	15pf	9pf	2.5pf	4.5pf	6.8pf	1.0pf	3.3pf	0.8pf
Maximum Reverse Current	at rated V_{RRM}	I_R	0.5µA							
Max. Reverse Recovery Time	$I_F=0.5I_{FAVM}; I_R=-I_{FAVM}; I_{RR}=-0.25I_{FAVM}, \text{Note 1}$	T_{RR}	100ns	75ns	75ns	75ns	50ns	60ns	75ns	75ns
Maximum Surge Current	8.3msec, half sine	I_{FSM}	15A	10A	3A	10A	10A	3A	10A	3A
Typical Thermal Resistance	Note 2	$R\theta_{JL}$	30°C/W	17°C/W	40°C/W	32°C/W	32°C/W	55°C/W	15°C/W	45°C/W

NOTES:

1. For I_{FAVM} referenced to $T_L = 55^\circ\text{C}$ row
2. P.C.B. mounting on 0.2" x 0.2" (5.0mm x 5.0mm) copper solder pads
3. 8KV devices should not be operated above 5KV in air.

MECHANICAL CHARACTERISTICS:



DIMENSIONS IN INCHES (MM)