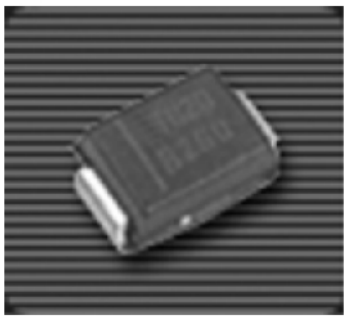
Super Fast Surface Mount Rectifiers

DO-214AA(SMB)



Features

- ROHS compliant
- Glass passivated chip
- High forward surge capability
- Meet MSL level 1, per J-STD-020 LF maximum peak of 250 °C
- Solder dip 260 °C / 40S
- Component in accordance to ROHS 2002/95/EC and WEEE 2002/96/WC
- UL recognition, file number E342874

Primary characteristics

$I_{F(AV)}$	1A
V_{RRM}	200V
I_{FSM}	40A
I_{RM}	2uA
V_{FM} at I_F=1A	0.875
T_J max.	150 °C

Applications

Ideal for ac-to-dc bridge full wave rectification suck as SMPS, home applianes, office equipment, indusrial automation applicatios

Mechanical data

- DO-214AA(SMB)
- Epoxy meets UL 94 V-0 flammability rating
- Terminals: Tin plated leads.
- Polarity: As marked.
- Mounting Torque:10cm-kg(8.8 inches-lbs)max.
- Recommended Torque:5.7 cm-kg(5 inches-lbs)

Maximum rating (Ta=25°C unless otherwise noted)

Parameter		Sym	DO-214AA(SMB) MURS120	Unit
Max. repetitive peak reverse voltage		V_{RRM}	200	V
Max. RMS reverse voltage		V_{RMS}	200	V
Max. DC blocking voltage		V_{DC}	200	V
Max. average forward current		$I_{F(AV)}$	1	A
Non-repetitive peak forward surge current 8.3ms single half-sine-wave		I_{FSM}	40	A
Max. instantaneous forward voltage drop per diode		V_{FM}	0.875	V
Max. instantaneous reverse current at rated DC blocking voltage	Ta=25 °C	I_{RM}	2	μA
	Ta=125 °C		200	
Operating junction temperature		T_J	-55 ~ +150	°C
Storage temperature		T_{STG}	-55 ~ +150	°C
Maximum reverse recovery time (Note1)		trr	25	nS
Typical thermal resistance (Note2)		$R_{\Theta J-A}$	13	°C/W

Notes:

1 Reverse Recovery Test Conditions: IF=0.5A, IR=1.0A, IRR=0.25A

2 The thermal resistance from junction to ambient,case or mount,mounted on P.C.B with 5×5mm copper pads,2 OZ,FR4 PCB

Ordering information (Example)				
PREFERRED	UNIT WEIGHT (g)	PREFERRED PACKAGE CODE	BASE QUANTITY	DELIVERY MODE
MURS120				

Typical characteristics

Fig. 1 – Forward Current Derating Curve

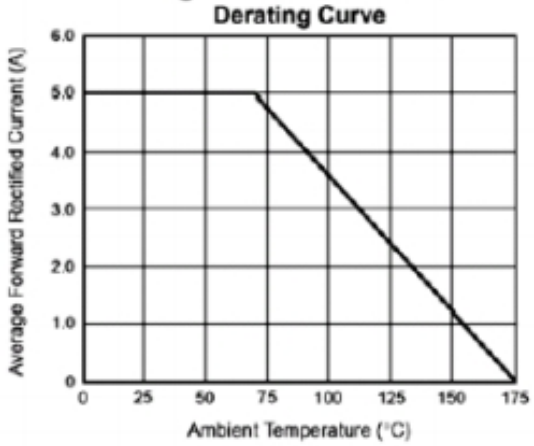


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current

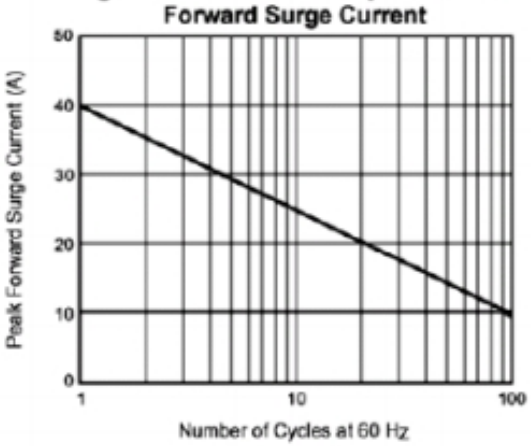


Fig. 3 – Typical Instantaneous Forward Characteristics

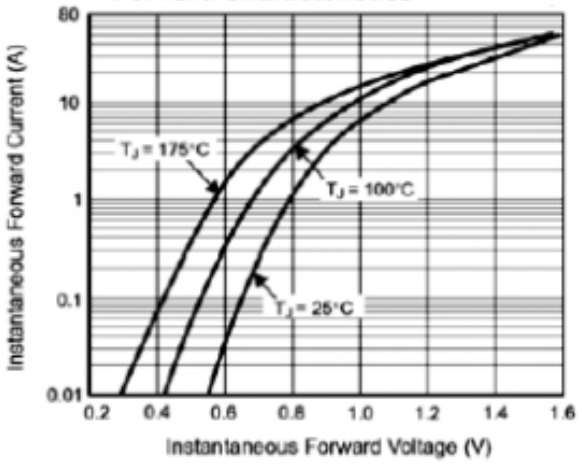
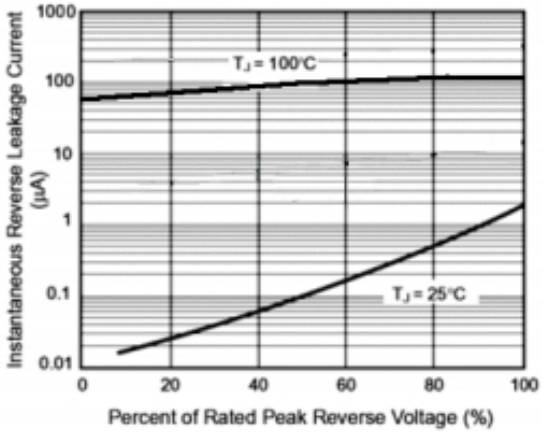
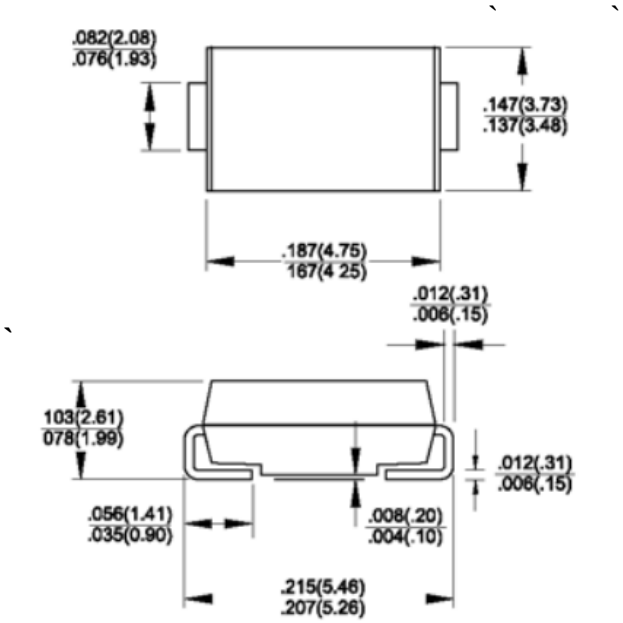


Fig. 4 – Typical Reverse Leakage Characteristics



Package outline dimensions



Dimensions in inches and (millimeters)

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