

S2A-B THRU S2M-B

2.0A Surface Mount General Purpose Rectifiers - 50V-1000V

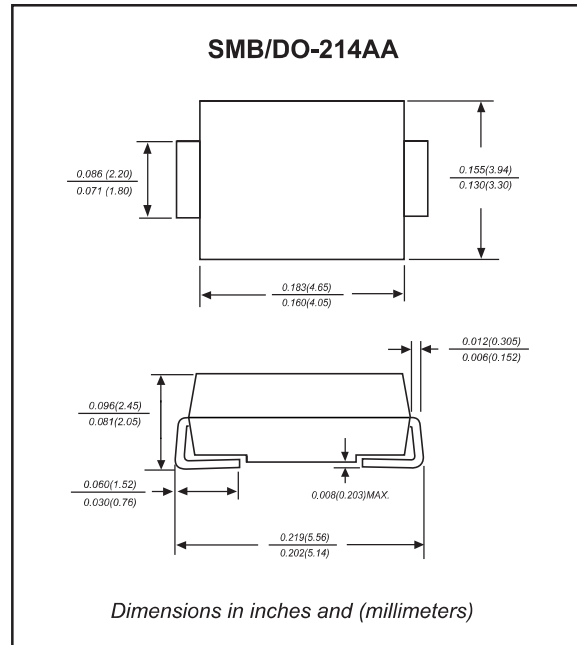
Features

- ▶ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ▶ For surface mounted applications
- ▶ Low reverse leakage
- ▶ Built-in strain relief, ideal for automated placement
- ▶ High forward surge current capability
- ▶ High temperature soldering guaranteed: 250°C/10 seconds at terminals
- ▶ Glass passivated chip junction
- ▶ Compliant to RoHS Directive 2011/65/EU
- ▶ Suffix "-H" indicates Halogen-free part, ex. S2M-B-H

Mechanical data

- ▶ **Case:** JEDEC DO-214AA molded plastic body
- ▶ **Terminals:** Solder plated, solderable per MIL-STD-750, Method 2026
- ▶ **Polarity:** Color band denotes cathode end
- ▶ **Mounting Position:** Any

Package outline



Maximum ratings and Electrical Characteristics (AT T_A=25°C unless otherwise noted)

PARAMETER	CONDITIONS	Symbol	MIN.	TYP.	MAX.	UNIT
Forward rectified current	See Fig.2	I _O			2.0	A
Forward surge current	8.3ms single half sine-wave (JEDEC methode)	I _{FSM}			60	A
Reverse current	V _R = V _{RRM} T _A = 25°C	I _R			5.0	μA
	V _R = V _{RRM} T _A = 100°C				50	
Thermal resistance	Junction to ambient NOTE 1	R _{θJA}		50		°C/W
Diode junction capacitance	f=1MHz and applied 4V DC reverse voltage	C _J		30		pF
Storage temperature		T _{STG}	-65		+150	°C

Note: 1.P.C.B. mounted with 0.2x0.2"(5.0x5.0mm) copper pad areas

SYMBOLS	V _{RRM} *1 (V)	V _{RMS} *2 (V)	V _R *3 (V)	V _F *4 (V)	Operating temperature T _J , (°C)
S2A-B	50	35	50	1.10	-55 to +150
S2B-B	100	70	100		
S2D-B	200	140	200		
S2G-B	400	280	400		
S2J-B	600	420	600		
S2K-B	800	560	800		
S2M-B	1000	700	1000		

*1 Repetitive peak reverse voltage

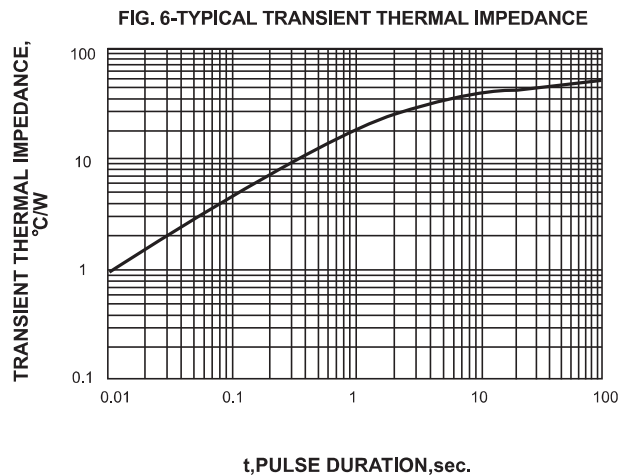
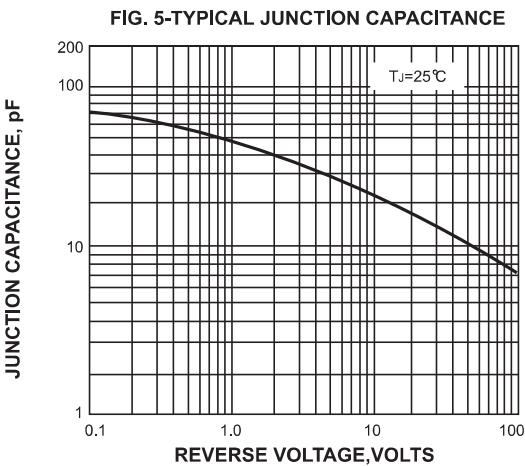
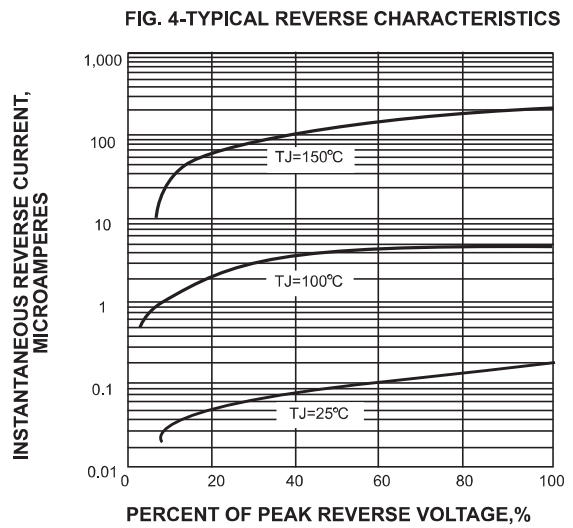
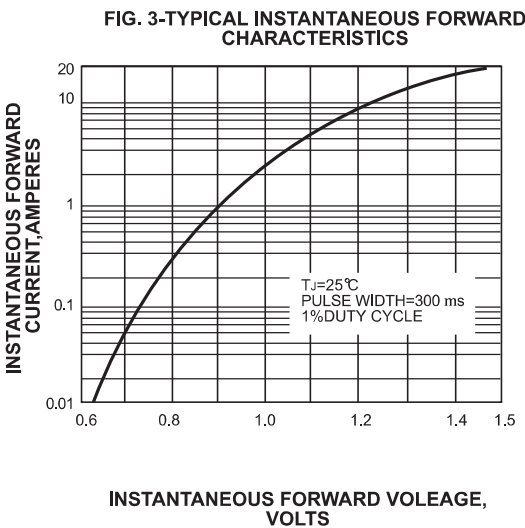
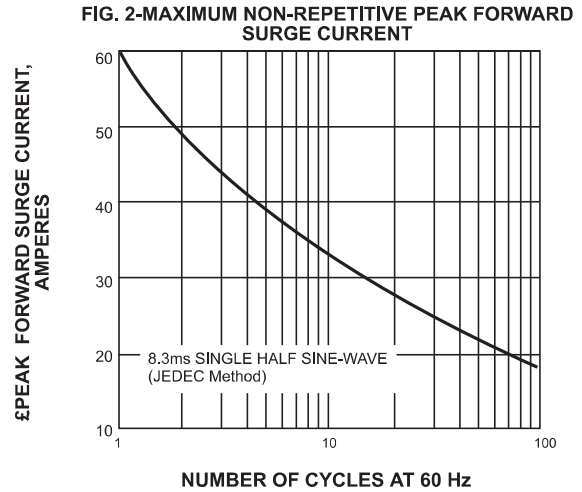
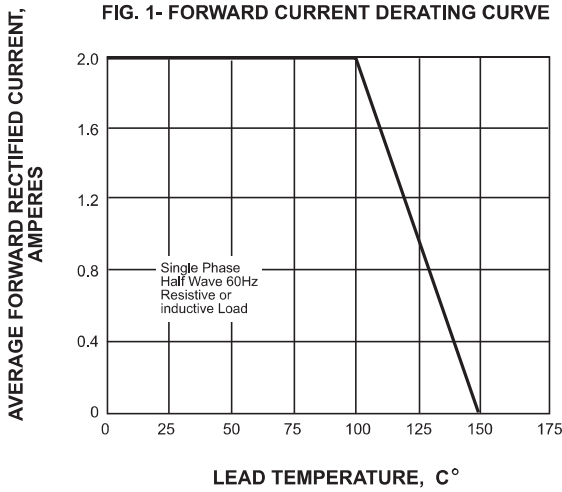
*2 RMS voltage

*3 Continuous reverse voltage

*4 Maximum forward voltage@I_F=2.0A



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Rating and characteristic curves

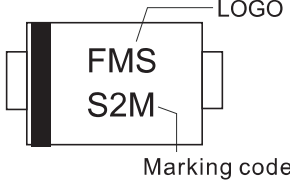
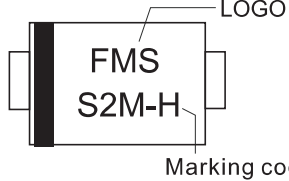


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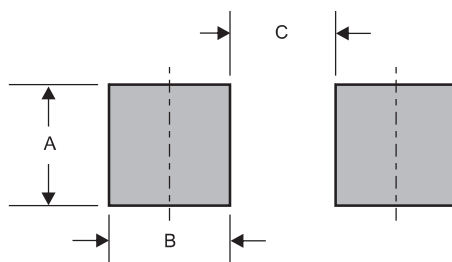
Pinning information

Pin	Simplified outline	Symbol
Pin1 cathode Pin2 anode		

Marking

Type number	Marking code	Example	
S2A-B	S2A	For Halogen Device	For Halogen-free Device
S2B-B	S2B		
S2D-B	S2D		
S2G-B	S2G		
S2J-B	S2J		
S2K-B	S2K		
S2M-B	S2M		

Suggested solder pad layout



Dimensions in inches and (millimeters)

PACKAGE	A	B	C
SMB	0.078 (2.00)	0.059 (1.50)	0.110 (2.80)