

Surface Mount Rectifiers

RS2AFA--RS2MFA

FEATURES

- Low profile package
- For surface mounted applications
- Built-in strain relief, ideal for automated placement
- Plastic package has underwriters, laborator flammability classification 94V-0
- High temperature soldering: 250°C/10 seconds at terminals



MECHANICAL DATA

- Case :JEDEC SMAFL, molded plastic over passivated chip
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: color band denotes cathode end

Maximum Ratings (@TA = 25°C unless otherwise specified)

Characteristic	Symbol	RS2AFA	RS2BFA	RS2DFA	RS2GFA	RS2JFA	RS2KFA	RS2MFA	UNITS
Marking code		R2A	R2B	R2D	R2G	R2J	R2K	R2M	
Maximum recurrent peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified current $T_L=90^\circ\text{C}$	$I_{F(AV)}$	2.0							A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load	I_{FSM}	50							A

Thermal Characteristics

Characteristic	Symbol	RS2AFA	RS2BFA	RS2DFA	RS2GFA	RS2JFA	RS2KFA	RS2MFA	UNITS
Operating temperature range	T_J	- 55 ----- + 150							°C
storage temperature range	T_{STG}	- 55 ----- + 150							°C

Electrical Characteristics (@TA = 25°C unless otherwise specified)

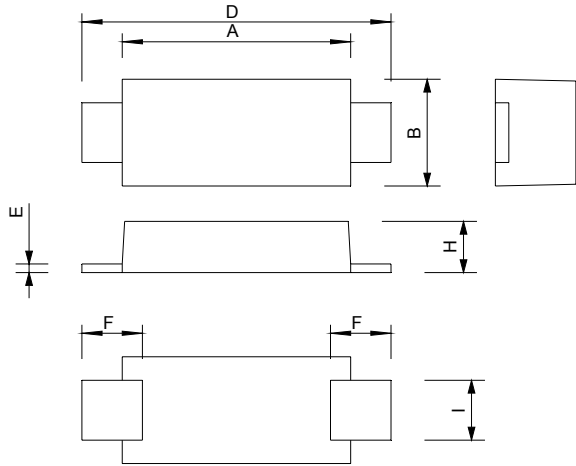
Characteristic	Symbol	RS2AFA	RS2BFA	RS2DFA	RS2GFA	RS2JFA	RS2KFA	RS2MFA	UNITS
Maximum instantaneous forward voltage at 2.0 A	V_F	1.30							V
Maximum reverse current @ $T_A=25^\circ\text{C}$ at rated DC blocking voltage @ $T_A=125^\circ\text{C}$	I_R	5.0 200							μA
Typical reverse recovery time (Note1)	t_{rr}	150				250	500		ns

NOTE: 1.Reverse recovery time test conditions: $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{rr}=0.25\text{A}$

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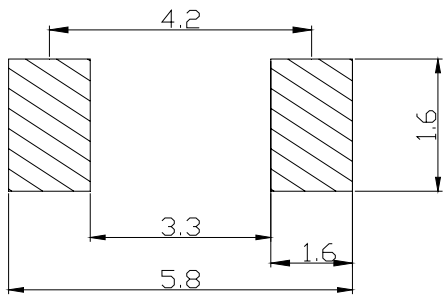
RS2AFA--RS2MFA

PACKAGE OUTLINE DIMENSIONS



SMAFL		
Dim	Min	Max
A	3.30	3.70
B	2.40	2.80
D	4.35	4.85
E	0.10	0.30
F	0.70	1.40
H	1.15	1.45
I	1.30	1.60
All Dimensions in mm		

SOLDERING FOOTPRINT



Unit : mm

PACKAGE INFORMATION

Device	Package	Shipping
RS2AFA--RS2MFA	SMAFL	10000/Tape&Reel



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FIG.1 – FORWARD DERATING CURVE

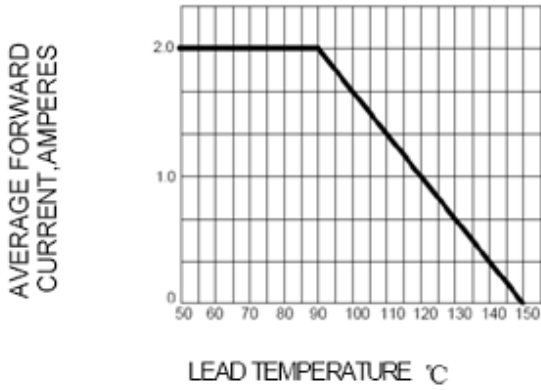


FIG.2 PEAK FORWARD SURGE CURRENT

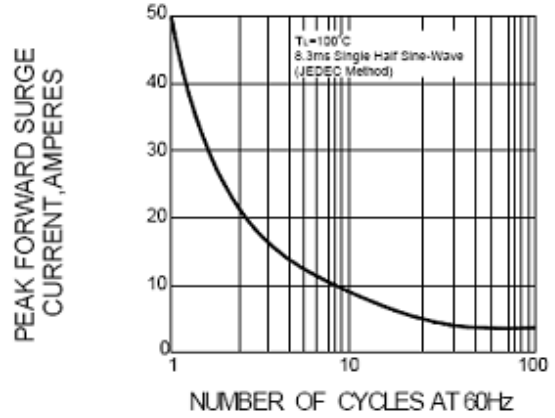


FIG.3 – TYPICAL FORWARD CHARACTERISTICS

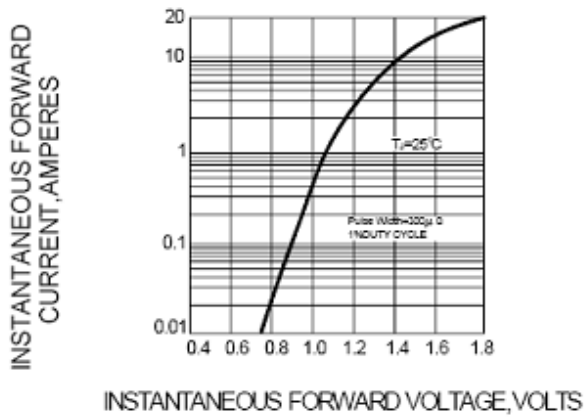


FIG.4 – TYPICAL REVERSE CHARACTERISTICS

