

Fast Recovery Diodes

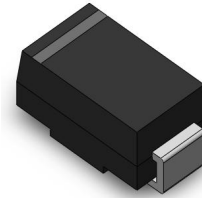
FR2AA~FR2MA
2A
50 to 1000V
DO-214AC(SMA)

Features

- ◆ For surface mounted applications
- ◆ Low profile package
- ◆ Glass Passivated Chip Junction
- ◆ Easy to pick and place
- ◆ Fast reverse recovery time
- ◆ Lead free in comply with EU RoHS 2011/65/EU directives

Mechanical Data

- ◆ Case: SMA
- ◆ Terminals: Solderable per MIL-STD-750, Method 2026
- ◆ Approx.Weight: 0.055g / 0.002oz

DO-214AC(SMA)


Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Parameter		Symbol	FR2AA	FR2BA	FR2DA	FR2GA	FR2JA	FR2KA	FR2MA	Unit
Maximum Repetitive 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 at T _C = 125°C		I _{F(AV)}	2							A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load		I _{FSM}	50							A
Maximum Forward Voltage at 2 A		V _F	1.3							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	Ta =25°C	I _R	5							μA
	Ta =125°C		100							
Typical Junction Capacitance at V _R =4V, f=1MHz		C _J	22							pF
Maximum Reverse Recovery Time (1)		t _{rr}	150				250	500		ns
Typical Thermal Resistance (2)		R _{θJA}	65							°C/W
		R _{θJC}	20							
Operating and Storage Temperature Range		T _J , T _{STG}	-55 ~ +150							°C

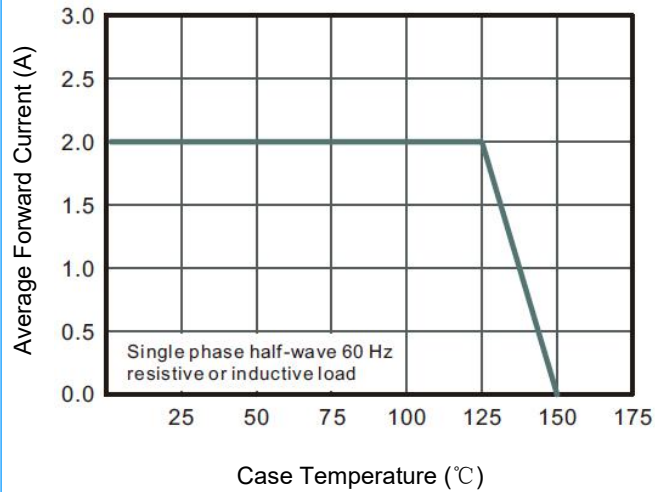
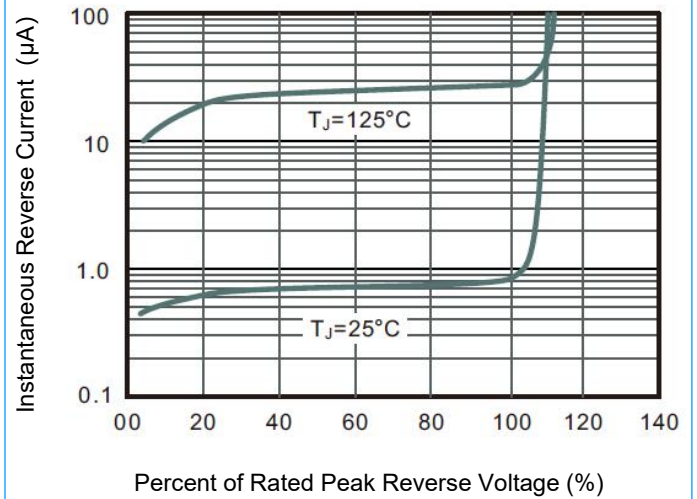
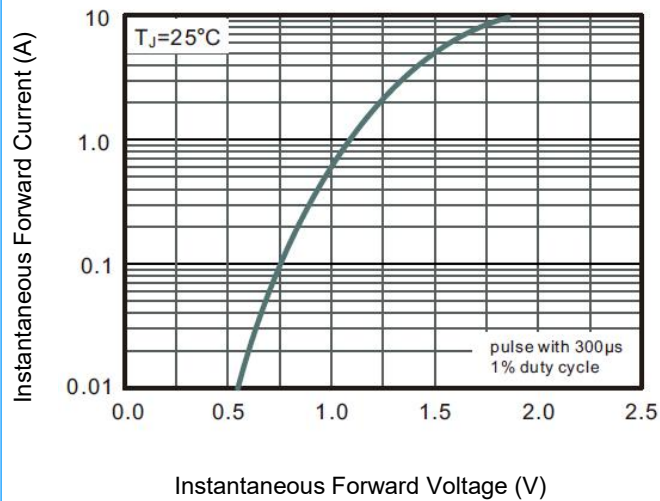
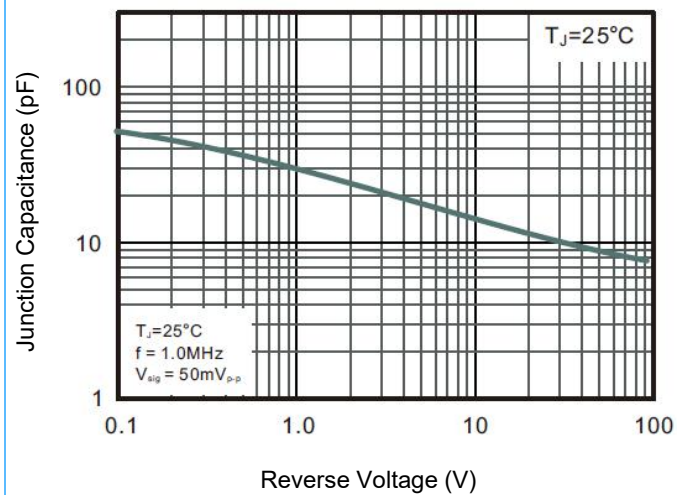
Notes:

- (1) Measured with $I_F = 0.5\text{ A}$, $I_R = 1\text{ A}$, $I_{rr} = 0.25\text{ A}$
- (2) P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas.

Fast Recovery Diodes

FR2AA~FR2MA
2A
50 to 1000V
DO-214AC(SMA)

Characteristic Curves

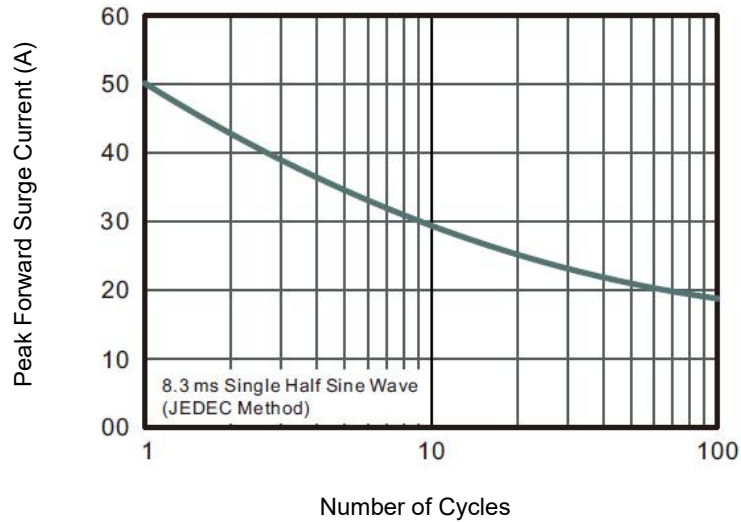
Fig1. Forward Current Derating Curve

Fig2. Typical Reverse Characteristics

Fig3. Typical Instantaneous Forward Characteristics

Fig4. Typical Junction Capacitance


Fast Recovery Diodes

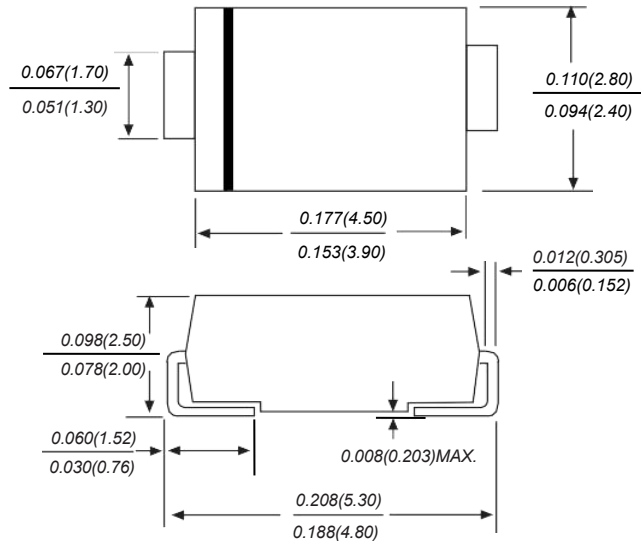
FR2AA~FR2MA
2A
50 to 1000V
DO-214AC(SMA)

Characteristic Curves (Continue)

Fig5. Maximum Non-Repetitive Peak Forward Surge Current



DO-214AC(SMA) Package Outline

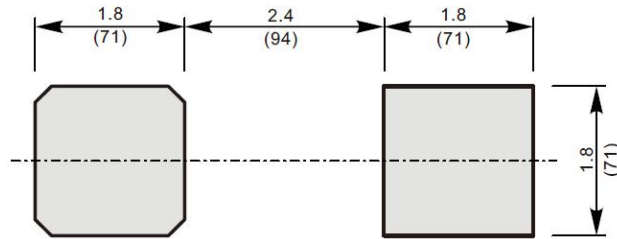


Dimensions in inches and (millimeters)

Fast Recovery Diodes

FR2AA~FR2MA
2A
50 to 1000V
DO-214AC(SMA)

The Recommended Mounting Pad Size



Unit : $\frac{\text{mm}}{(\text{mil})}$

Packaging Information

Part Number	Component Package	Quantity
FR2AA~FR2MA	DO-214AC(SMA)	5000 PCS/REEL

Warning



- ◆ SOCAY owns the rights to a number of patents, trademarks, copyrights, trade secrets, and other intellectual property.
- ◆ SOCAY reserves the right to make changes without further notice to any products herein.
- ◆ SOCAY makes no warranties, representations or warranties as to the fitness of its products for any particular purpose, and disclaims any liability.
- ◆ The parameters provided in the SOCAY datasheet specification may vary from application to application, and the actual performance may vary over time. All operating parameters must be verified by the customer's technical expert before application.
- ◆ Any and all responsibilities and liabilities are disclaimed if any item under this notice of warning is not complied with.