FS2AA THRU FS2MA

2.0 Amp. Surface Mount Glass Passivated Fast Recovery Rectifiers

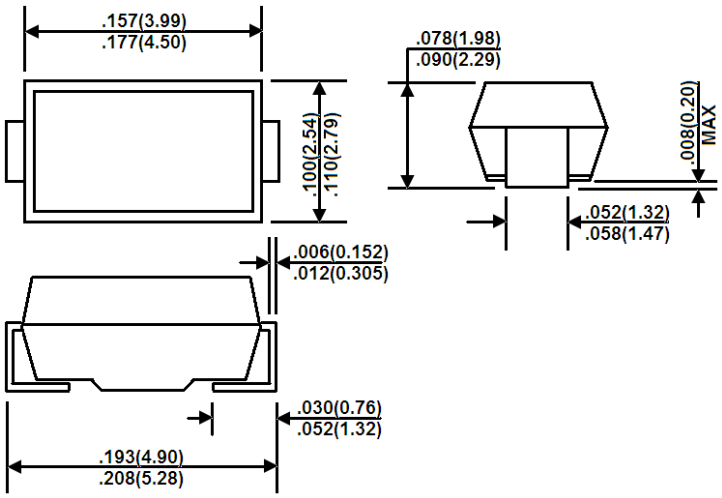
Features

* For surface mounted application
* Extremely Low Thermal Resistance
* Easy Pick and Place
* High Temp Soldering: 260℃ For 10seconds at Terminals
* Superfast Recovery Times For High Efficiency

RoHS COMPLIANT

Package Outline Dimensions in inches (millimeters)

SMA:



Mechanical Data

* Case: DO-214AC Molded plastic
* Terminals: Solder plated
* Polarity: Indicated by cathode band
* Standard packaging:
  12mm tape(ELA STD RS-481)

Maximum Ratings and Electrical Characteristics

Rating at 25 ℃ ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

Type Number	Symbols	FS2AA	FS2BA	FS2DA	FS2GA	FS2JA	FS2KA	FS2MA	Unit
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 D.C Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	2							A
Peak Forward Surge Current, 8.3ms single half sine-wave	I_{FSM}	50							A
Maximum Instantaneous Forward Voltage at 2A(Note1)	V_F	1.3							V
Maximum D.C Reverse Current @ T_J=25℃ at Rated D.C Blocking Voltage @ T_J=125℃	I_R	5 200							μA
Maximum Reverse Recovery Time(Note2)	Trr	150				250	500		nS
Typical Junction Capacitance(Note3)	C_J	50							pF
Typical Thermal Resistance	$R_{\theta JL}$ $R_{\theta JA}$	18 55							℃/W
Operating and Storage Temperature Range	T_J/T_{STG}	-55 to +150							℃

NOTE: 1、Pulse test: tp=300μS, 1% duty cycle 2、Reverse Recovery Test Conditions: I_F=0.5A, I_R=1.0A, I_{RR}=0.25A.

3、Measured at 1MHz and applied reverse voltage of 4.0V D.C.

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Ratings and Characteristic Curves

FIG.1 FORWARD CURRENT DERATING CURVE

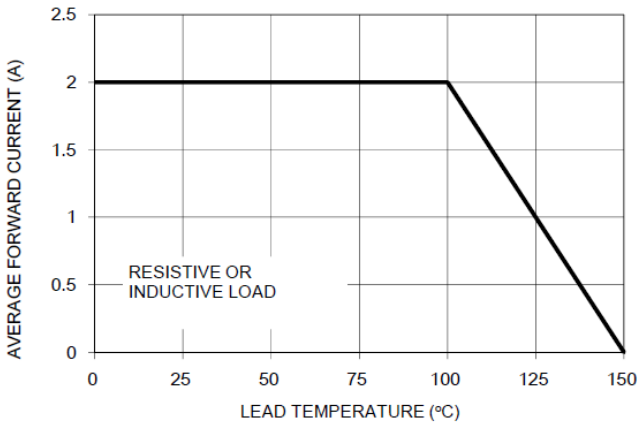


FIG. 2 TYPICAL REVERSE CHARACTERISTICS

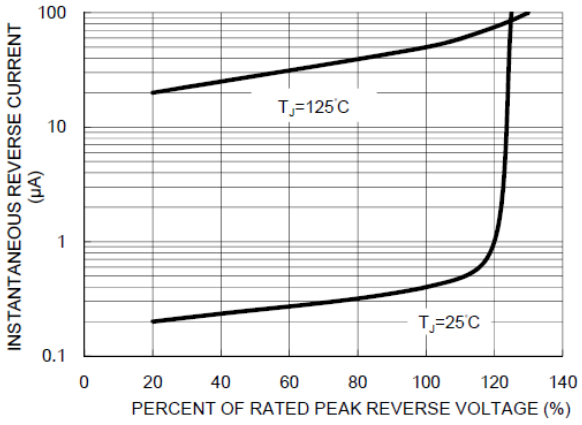


FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

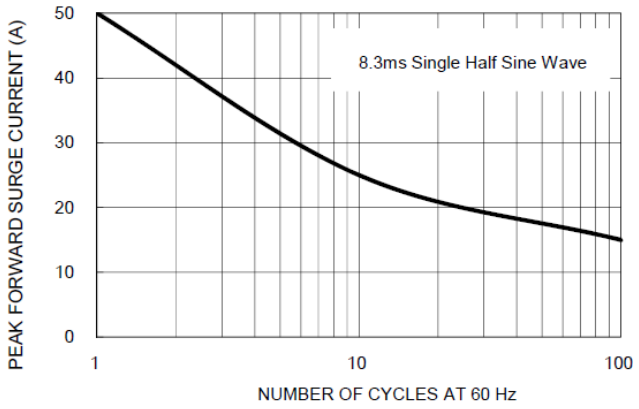


FIG. 4 TYPICAL FORWARD CHARACTERISTICS

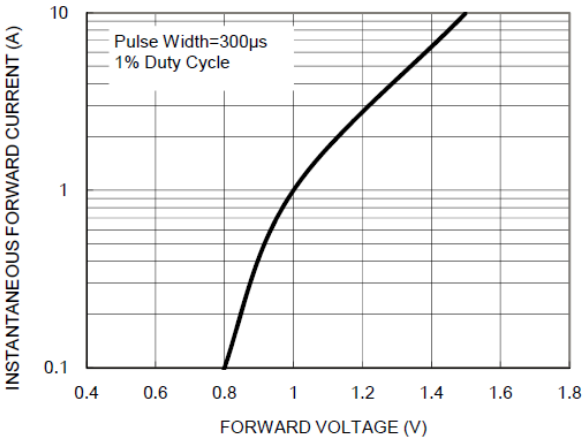


FIG. 5 TYPICAL JUNCTION CAPACITANCE

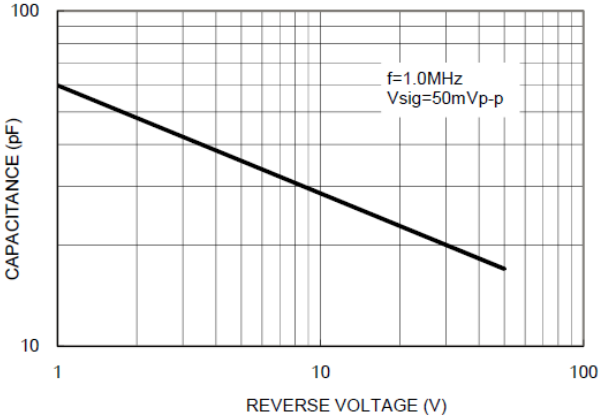
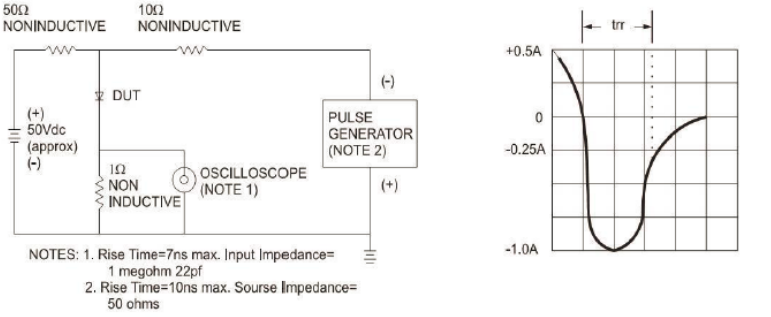


FIG.6 REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM



Ordering Information

Part No.	Package	Packing
FS2AA~FS2MA	SMA	5K/Reel
FS2AA~FS2MA	SMA	6K/Reel
FS2AA~FS2MA	SMA	7.5K/Reel