CSMA400XSA Series

1.0Amp. Surface Mount Glass Passivated Type Rectifiers

Features

- For surface mounted application
- Low forward voltage drop and low leakage current
- High current capability
- Easy pick and place
- High surge current capability
- Plastic material used carries Underwriters Laboratory Flammability Classification 94V-0 Utilizing Flame Retardant Epoxy Molding Compound.
- High temperature soldering: 250°C/10 seconds at terminals
- Exceeds environmental standards of MIL-S-19500/228

Mechanical Data

- Case: SMA/DO-214AC Molded Plastic.
- Terminals: Solder plated. Solderable per MIL-STD-750 Method
- Polarity: Indicated by cathode band.
- Packaging: 12mm tape per EIA STD RS-481.
- Weight: 0.06 gram, 0.0018 ounce

Maximum Ratings and Electrical Characteristics

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

Type Number	CSMA 4001	CSMA 4002	CSMA 4003	CSMA 4004	CSMA 4005	CSMA 4006	CSMA 4007	Units
Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @TL=110°C	1							A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load(JEDEC method)	30							A
Maximum Instantaneous Forward Voltage @ 1.0A	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	5(@Ta=25°C) 50(@Ta=125°C)							uA
Maximum Reverse Recovery Time (Note 1)	1.8							uS
Typical Junction Capacitance (Note 2)	12							pF
Operating Temperature Range Tj	-55 to +150							°C
Storage Temperature Range Tstg	-55 to +150							°C

Note1: Reverse Recovery Test Conditions: IF=0.5A, IR=1.0A, IRR=0.25A
Note2: Measured at 1 MHz and Applied VR=4.0Volts

Characteristic Curves

FIG. 1-MAXIMUM FORWARD CURRENT DERATING CURVE

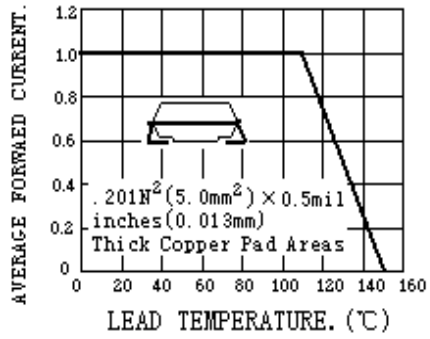


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

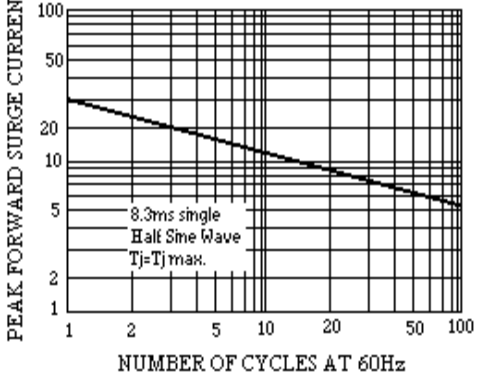


FIG. 3-TYPICAL FORWARD CHARACTERISTICS

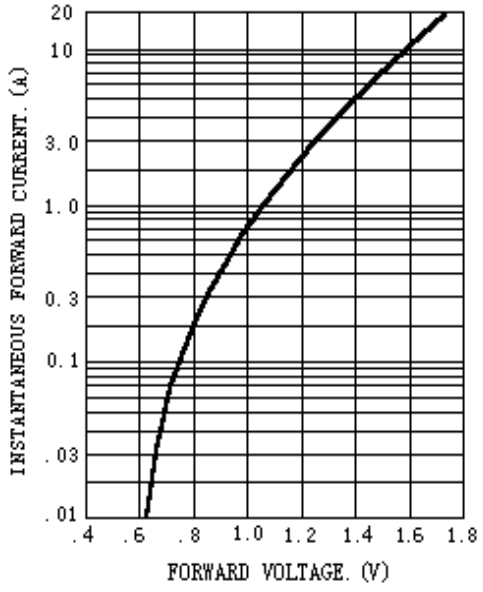


FIG. 6-TYPICAL REVERSE CHARACTERISTICS

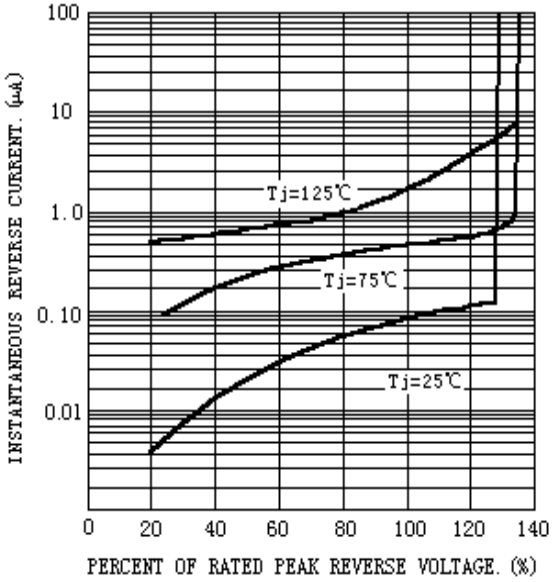
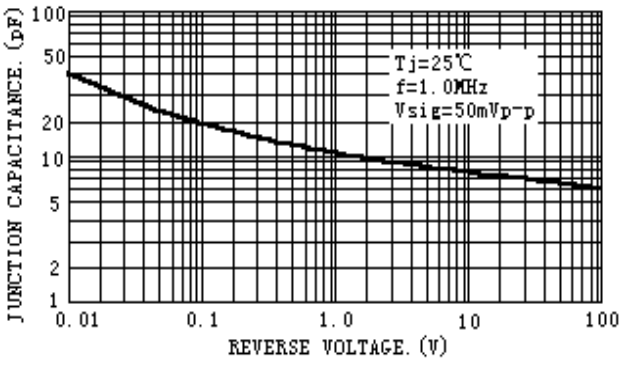
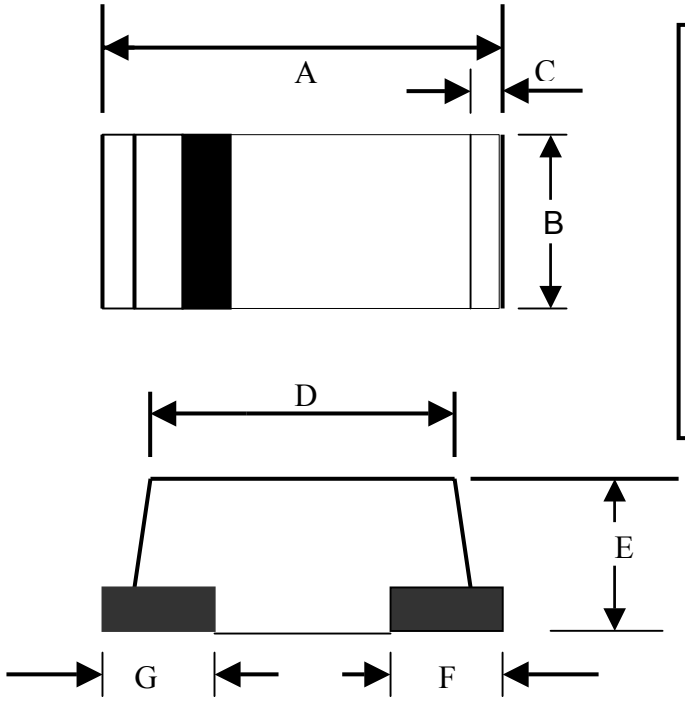


FIG. 5-TYPICAL JUNCTION CAPACITANCE



SMA/DO-214AC Dimension



Marking Code:

Device	4001	4002	4003	4004
Code	A1	A2	A3	A4

Device	4005	4006	4007	
Code	A5	A6	A7	

SMA Plastic Surface
Mounted Package
CYStek Package Code:SA

*:Typical

DIM	Inches		Millimeters		DIM	Inches		Millimeters	
	Min.	Max.	Min.	Max.		Min.	Max.	Min.	Max.
A	0.177	0.185	4.4	4.8	E	0.060	0.067	1.5	1.7
B	0.094	0.110	2.4	2.8	F	0.04(typ)		1.0(typ)	
C	0.012(typ)		0.3(typ)		G	0.04(typ)		1.0(typ)	
D	0.150	0.165	3.8	4.2	-	-	-	-	-

Notes : 1.Controlling dimension : millimeters.
2.Maximum lead thickness includes lead finish thickness, and minimum lead thickness is the minimum thickness of base material.
3.If there is any question with packing specification or packing method, please contact your local CYStek sales office.

Material :

- Lead : 42 Alloy ; solder plating
- Mold Compound : Epoxy resin family, flammability solid burning class:UL94V-0