

Surface Mount Fast Switching Rectifier

Features

- Low profile surface mounted package
- Fast recovery time for high efficiency
- Glass passivated junction
- Plastic package has underwriters laboratory flammability classification 94 V-0
- High temperature soldering: 250 °C / 10 seconds at terminals
- RoHS compliant



Mechanical Data

Case:	JEDEC DO-214AC molded plastic
Terminals:	Solder plated solderable per MIL-STD-750, Method 2026
Polarity:	cathode end indicated by color band
Weight:	0.002 Ounce, 0.064 gram

Maximum Ratings ($T_{Ambient}=25^{\circ}C$ unless noted)

Symbol	Description	RS1A	RS1B	RS1D	RS1G	RS1J	RS1K	RS1M	Unit	Conditions
VRRM	Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	V	
VRMS	Maximum RMS Voltage	35	70	140	280	420	560	700	V	
VDC	Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V	
I_{AV}	Maximum Average Forward Rectified Current	1.0							A	TA=50°C
I_{FSM}	Peak Forward Surge Current	30							A	8.3ms single half sine-wave superimposed on rated load (JEDEC method)

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

Surface Mount Fast Switching Rectifier

RS1A~RS1M

Electrical Characteristics ($T_{Ambient}=25^{\circ}C$ unless noted)

Symbol	Description	RS1A	RS1B	RS1D	RS1G	RS1J	RS1K	RS1M	Unit	Conditions
V_F	Maximum Instantaneous Forward Voltage	1.3							V	I _F at 1.0 A
I_R	Maximum DC Reverse Current at Rated DC Blocking Voltage	5							μA	TA = 25 °C
		100								TA = 125 °C
t_{rr}	Typical Reverse Recovery Time	150			250	500		nS	I _F = 0.5A, I _R = 1.0A, I _{rr} = 0.25A	
C_J	Typical Junction Capacitance	10				7		pf	Measured at 1.0 MHz and Applied V _r = 4.0 volts.	
R_{θ-JL}	Maximum Thermal Resistance	32							° C/W	Mounted on 0.2" x 0.2" (5mmx5mm) copper pad area
R_{θ-JA}		105								
T_J,T_{STG}	Operating Junction and Storage Temperature Range	-55 to 150							° C	

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

Typical Characteristics Curves

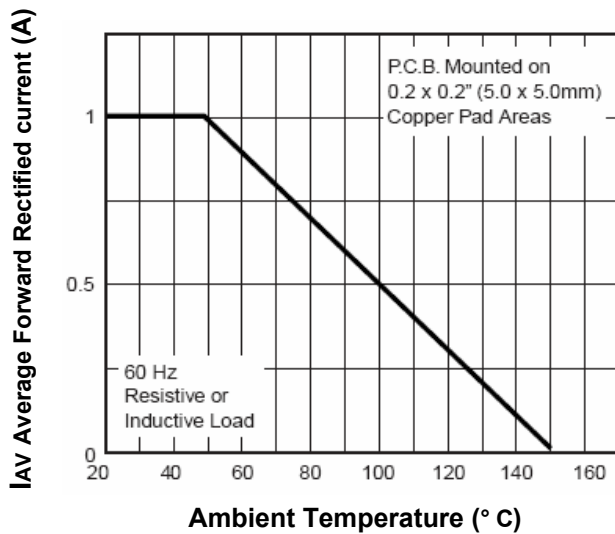


Fig.1- Forward Current Derating Curve

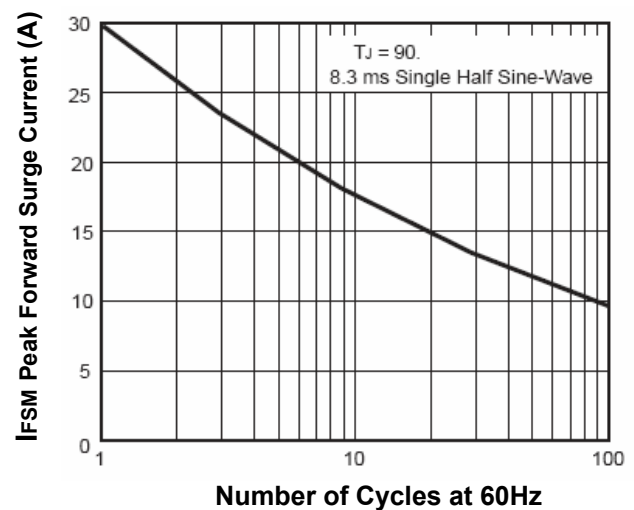
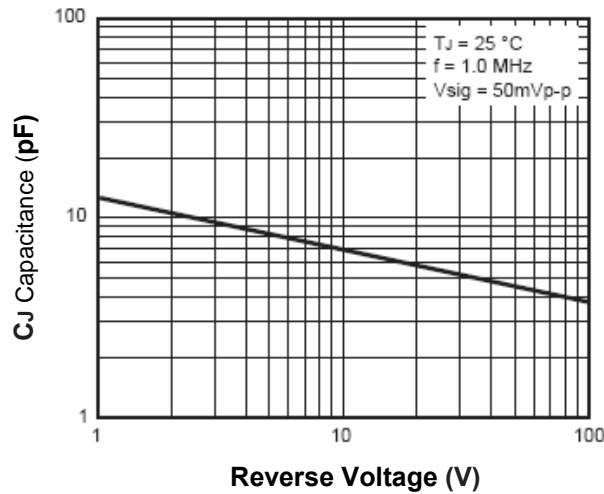
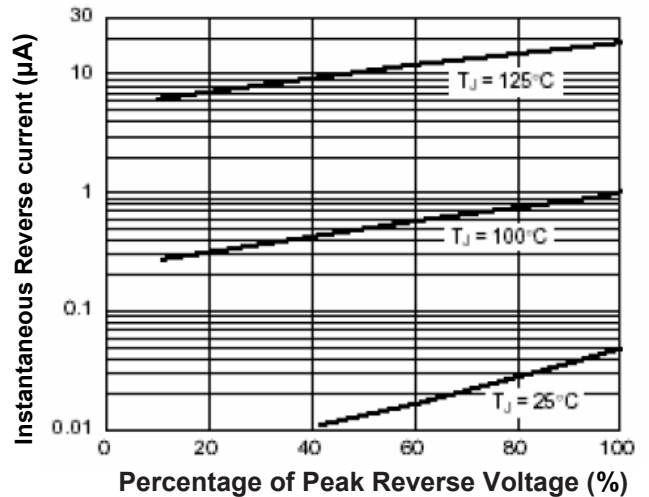
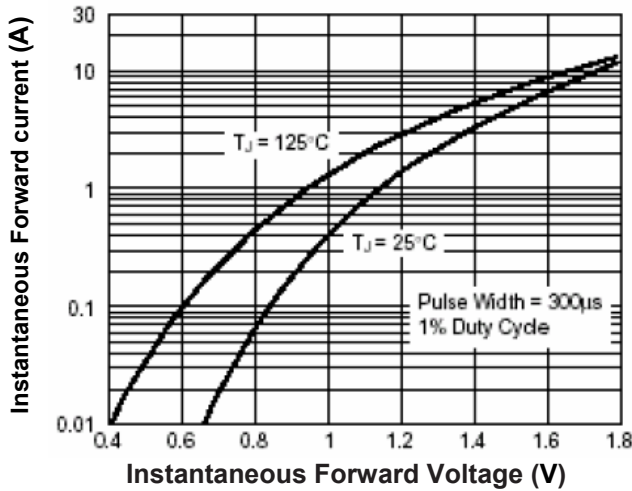


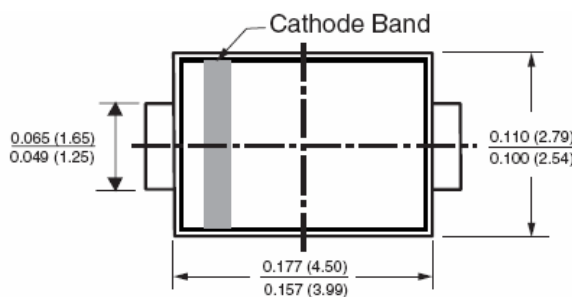
Fig.2- Max. Non-Repetitive Forward Surge Current

Surface Mount Fast Switching Rectifier

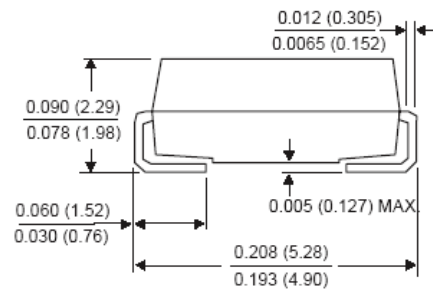
RS1A~RS1M



Dimensions in inch (mm)



DO214AC
(SMA)



Surface Mount Fast Switching Rectifier

RS1A~RS1M

How to contact us:

US HEADQUARTERS

28040 WEST HARRISON PARKWAY, VALENCIA, CA 91355-4162

Tel: (800) TAITRON (800) 247-2232 (661) 257-6060

Fax: (800) TAITFAX (800) 824-8329 (661) 257-6415

Email: taitron@taitroncomponents.com

Http://www.taitroncomponents.com

TAITRON COMPONENTS MEXICO, S.A .DE C.V.

BOULEVARD CENTRAL 5000 INTERIOR 5 PARQUE INDUSTRIAL ATITALAQUIA, HIDALGO C.P.
42970 MEXICO

Tel: +52-55-5560-1519

Fax: +52-55-5560-2190

TAITRON COMPONETS INCORPORATED E REPRESENTAÇÕES DO BRASIL LTDA

RUA DOMINGOS DE MORAIS, 2777, 2.ANDAR, SALA 24 SAÚDE - SÃO PAULO-SP 04035-001 BRAZIL

Tel: +55-11-5574-7949

Fax: +55-11-5572-0052

TAITRON COMPONETS INCORPORATED, SHANGHAI REPRESENTATIVE OFFICE

CROSS REGION PLAZA, 899 LINGLING ROAD, SUITE 18C, SHANGHAI, 200030, CHINA

Tel: +86-21-54249942

Fax: +86-21-5424-9931