



RS1A-PJ~RS1M-PJ

Surface Mount Fast Recovery Rectifiers

Features

- For surface mount applications
- Glass passivated chip junction
- Fast reverse recovery time
- Low profile package



1.Cathode ← 2.Anode

Marking Code:

RS1A-PJ: RS1A
 RS1B-PJ: RS1B
 RS1D-PJ: RS1D
 RS1G-PJ: RS1G
 RS1J-PJ: RS1J
 RS1K-PJ: RS1K
 RS1M-PJ: RS1M

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 current derate by 20 %.

Parameter	Symbols	RS1A-PJ	RS1B-PJ	RS1D-PJ	RS1G-PJ	RS1J-PJ	RS1K-PJ	RS1M-PJ	Units
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 $T_C = 125^\circ$	$I_{F(AV)}$	1.0							A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	I_{FSM}	30							A
Maximum Instantaneous Forward Voltage at 1 A	V_F	1.3							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	5							μA
		50							
Typical Junction Capacitance ^{Note1}	C_j	15							pF
Typical Thermal Resistance ^{Note2}	$R_{\theta JA}$	75							°C/W
Maximum Reverse Recovery Time ^{Note3}	T_{rr}	150				250	500		nS
Junction Temperature	T_J	150							°C
Storage Temperature Range	T_{STG}	-55 to +150							°C

Note:

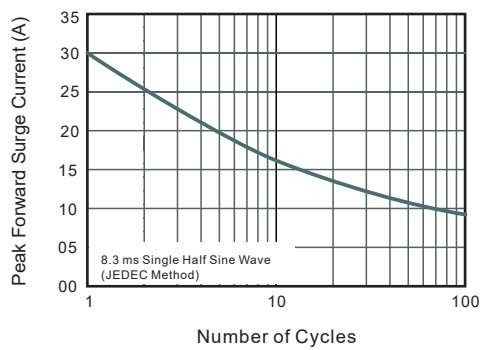
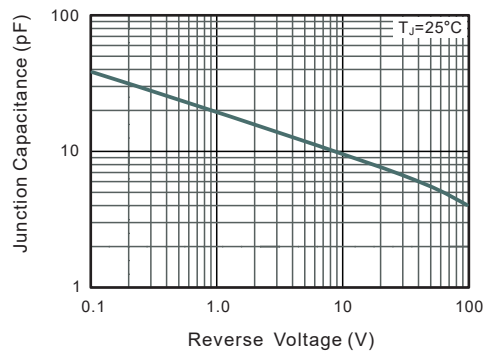
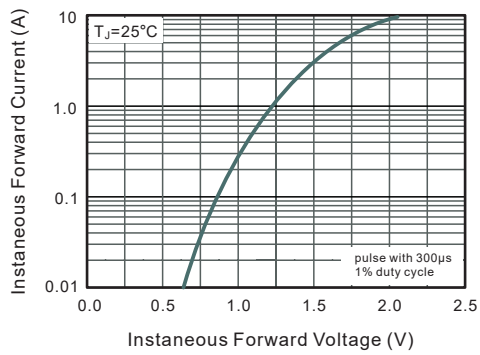
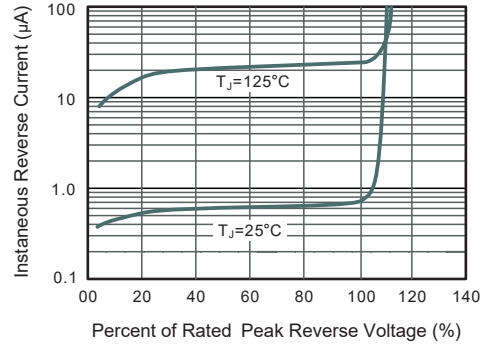
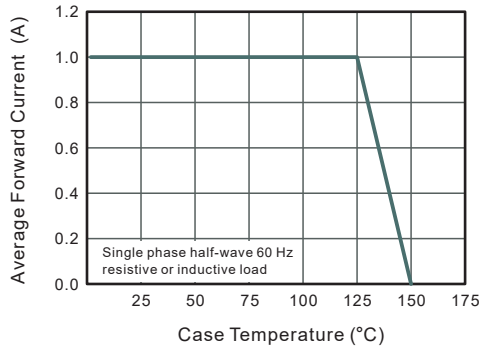
1. Measured at 1 MHz and applied reverse voltage of 4 V D.C
2. P.C.B. mounted with 1.0" X 1.0" (2.54 X 2.54 cm) copper pad areas.
3. Measured with $I_F = 0.5 A$, $I_R = 1 A$, $I_{rr} = 0.25 A$



RS1A-PJ~RS1M-PJ

Surface Mount Fast Recovery Rectifiers

Typical Characteristic Curves





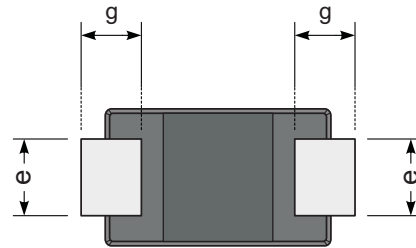
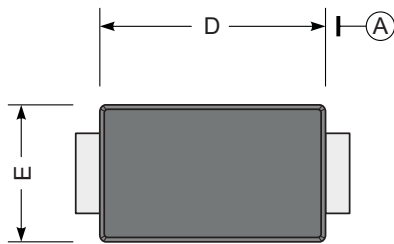
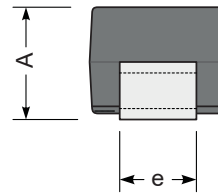
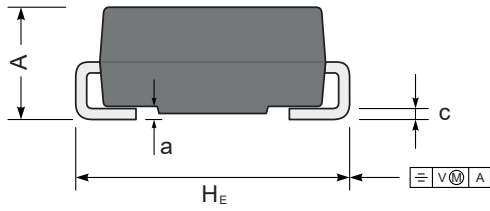
RS1A-PJ~RS1M-PJ

Surface Mount Fast Recovery Rectifiers

Package Outline

SMA

Dimensions in mm



UNIT		A	D	E	H _E	c	e	g	a
mm	max	2.2	4.5	2.7	5.2	0.31	1.6	1.5	0.3
	min	1.9	4.0	2.3	4.7	0.15	1.3	0.9	
mil	max	87	181	106	205	12	63	59	12
	min	75	157	91	185	6	51	35	