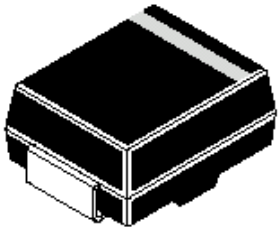
Continental Device India Limited

An ISO/TS 16949 and ISO 9001 Certified Manufacturer

SURFACE MOUNT FAST RECOVERY RECTIFIER

RS1A - RS1M



DO214-AC
Surface Mount Package

Fast Recovery Times for High Efficiency

ABSOLUTE MAXIMUM RATINGS (T_a=25ºC)

DESCRIPTION	SYMBOL	RS1A	RS1B	RS1D	RS1G	RS1J	RS1K	RS1M	UNIT
Peak Repetitive Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Average Forward Rectified Current @ T_L=90°C	$I_{(AV)}$	1.0							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	30							A
Forward Voltage @ 1.0A	V_F	1.3							V
DC Reverse Current T_a=25°C	I_R	5.0							µA
@ Rated DC Blocking Voltage T_a=125°C		150							µA
Junction Capacitance (Note1)	C_j	typ 12							pF
Thermal Resistance (Note2)	$R_{th\ (J-L)}$	typ 32							ºC/W
Reverse Recovery Time (Note3)	T_{RR}	150				250	500		ns
Operating Junction Temperature Range	T_j	- 55 to +150							ºC
Storage Temperature Range	T_{stg}	- 55 to +150							ºC

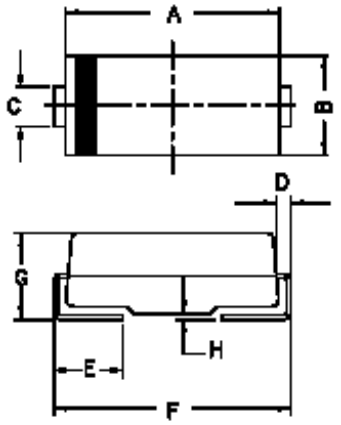
Notes 1. Measured @ 1MHz and Applied Reverse Voltage of 4.0V

2. Thermal Resistance from Junction to Lead Mounted on P.C.B. with 0.3" x 0.3" (8 x 8mm) Coppper Pad Areas

3. Reverse Recovery Test Conditions : I_F = 0.5A, I_R = 1.0A, I_{RR} = 0.25A

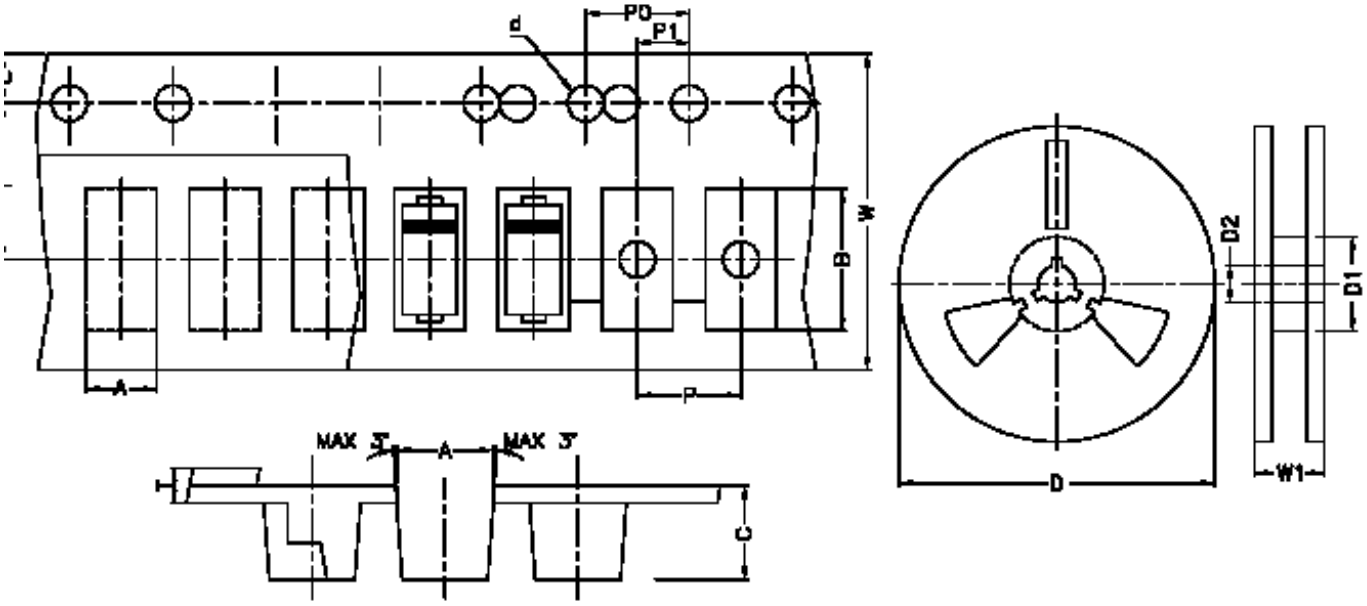
RS1A_RS1M Rev030105E

DO−214AC Package & Reel Taping Specification



DIM	MIN	MAX
A	4.06	4.57
B	2.18	2.79
C	1.28	1.70
D	0.152	0.305
E	0.89	1.50
F	4.70	5.31
G	1.70	2.31
H	0.102	0.203

All dimensions are in mm



ITEM	SYMBOL	SPECIFICATION (mm)	SPECIFICATION (Inch)
CARRIER WIDTH	A	3.2 MAX.	0.126 MAX.
CARRIER LENGTH	B	7.8 MAX.	0.307 MAX.
CARRIER DEPTH	C	4.5 MAX.	0.177 MAX.
SPROCKET HOLE	d	1.5 ±1.00	0.059±0.004
REEL OUTSIDE DIAMETER	D	178.0 ±2.00	7.00 ±0.079
REEL INNER DIAMETER	D1	50.0 MIN.	1.969 MIN.
FEED HOLE DIAMETER	D2	13.0 ±0.50	0.512 ±0.020
SPROCKET HOLE POSITION	E	1.75 ±0.10	0.069 ±0.004
PUNCH HOLE POSITION	F	5.5 ±0.10	0.217 ±0.004
PUNCH HOLE PITCH	P	4.0 ±0.10	0.157 ±0.004
SPROCKET HOLE PITCH	P0	4.0 ±0.10	0.157 ±0.004
EMBOSSMENT CENTER	P1	2.0 ±0.05	0.079 ±0.002
OVERALL TAPE THICKNESS	T	1.1 MAX.	0.043 MAX.
TAPE WIDTH	W	12.0 ±0.30	0.472 ±0.12
REEL WIDTH	W1	10.4 MAX.	0.724 MAX.

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