

**Surface Mount Rectifier**

**GS1A/M1 - GS1M/M7**

**DO-214AC  
Surface Mount**

**General Purpose Rectifiers**

**ABSOLUTE MAXIMUM RATINGS ( $T_a=25^\circ\text{C}$ )**

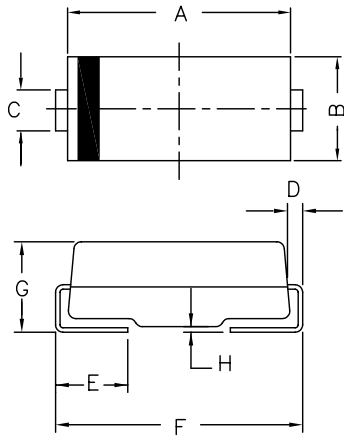
DESCRIPTION	SYMBOL	GS1A/ M1	GS1B/ M2	GS1D/ M3	GS1G/ M4	GS1J/ M5	GS1K/ M6	GS1M/ M7	UNIT
Peak Repetitive Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Average Forward Rectified Current $T_L=75^\circ\text{C}$	$I_{(AV)}$	1.0							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	30							A
Instantaneous Forward Voltage @ 1.0A	$V_F$	1.1							V
DC Reverse Current $T_A = 25^\circ\text{C}$	$I_R$	5.0							$\mu\text{A}$
@ Rated DC Blocking Voltage $T_A = 125^\circ\text{C}$		100							$\mu\text{A}$
Reverse Recovery Time (Note1) $T_J = 25^\circ\text{C}$	$T_{RR}$	2.5							$\mu\text{s}$
Maximum Thermal Resistance (Note3)	$R_{th(j-a)}$	28							$^\circ\text{C/W}$
Junction Capacitance (Note2)	$C_j$	typ 12							pF
Operating and Storage Junction Temperature Range	$T_j, T_{stg}$	-55 to +150							$^\circ\text{C}$

Notes 1. Reverse Recovery Test Conditions :  $I_F = 0.5\text{A}$ ,  $I_R = 0.1\text{A}$ ,  $I_{rr} = 0.25\text{A}$

2. Measured at 1MHz and applied  $V_R = 4.0\text{V}$

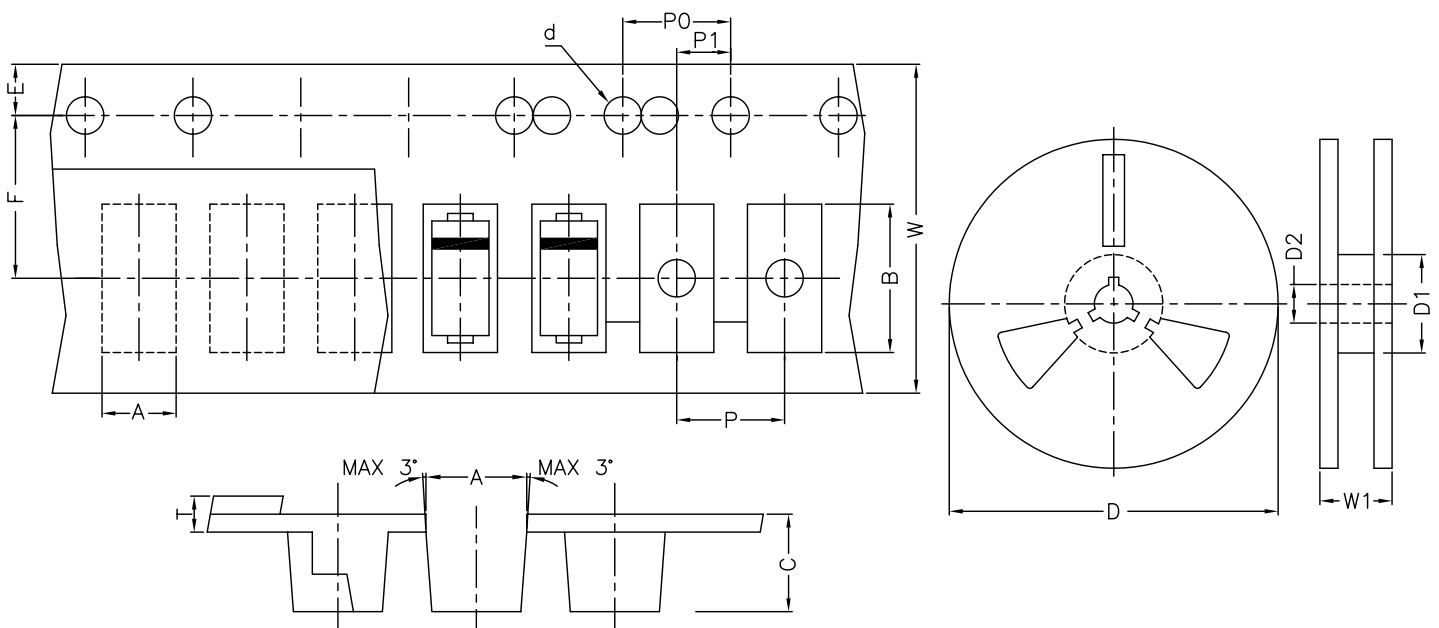
3.  $8.0\text{mm}^2$  (0.13mm thick) land areas

## DO-214AC Package & Reel Taping Specification



DIM	MIN	MAX
A	4.06	4.57
B	2.18	2.79
C	1.29	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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