

An ISO/TS 16949, ISO 9001 and ISO 14001 Certified Company

## **Surface Mount Rectifier**

GS1A/M1 - GS1M/M7

**DO-214AC Surface Mount** 

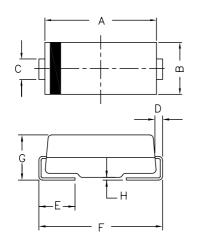
## **General Purpose Rectifiers**

ABSOLUTE MAXIMUM RATINGS (T<sub>2</sub>=25°C)

DESCRIPTION	SYMBOL	GS1A/	GS1B/	GS1D/	GS1G/	GS1J/	GS1K/	GS1M/	UNIT
		M1	M2	М3	M4	M5	M6	M7	
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 <sub>L</sub> =75°C	I <sub>(AV)</sub>	1.0					Α		
Peak Forward Surge Current 8.3ms									
single half sine-wave superimposed on	$I_{FSM}$	I <sub>FSM</sub> 30						Α	
rated load									
Instantaneous Forward Voltage @ 1.0A	$V_{F}$	1.1				V			
DC Reverse Current $T_A = 25^{\circ}C$	I <sub>R</sub> 5.0				μΑ				
@ Rated DC Blocking Voltage T <sub>A</sub> = 125°C					μΑ				
Reverse Recovery Time (Note1) T <sub>J</sub> = 25°C	$T_RR$	2.5				μs			
Maximum Thermal Resistance (Note3)	R <sub>th(j-a)</sub>	28					°C/W		
Junction Capacitance (Note2)	C <sub>i</sub>	typ 12					pF		
Operating and Storage Junction Temperature Range	$T_{j},T_{stg}$	-55 to +150					°C		

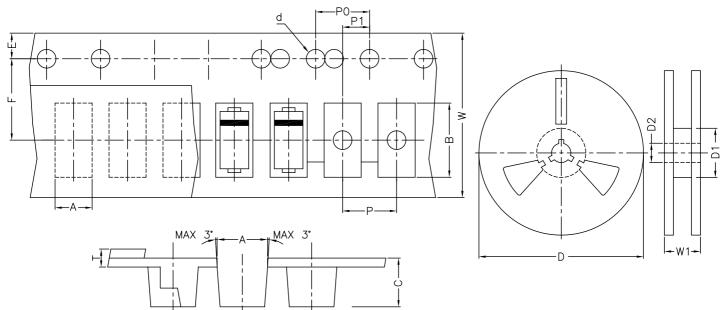
Notes 1. Reverse Recovery Test Conditions :  $I_F$  = 0.5A,  $I_R$  = 0.1A,  $I_{rr}$  = 0.25A 2. Measured at 1MHz and applied  $V_R$  = 4.0V 3. 8.0mm<sup>2</sup> (0.13mm thick) land areas

## DO-214AC Package & Reel Taping Specification



MIN	MAX
4.06	4.57
2.18	2.79
1.29	1.70
0.152	0.305
0.89	1.50
4.70	5.31
1.70	2.31
0.102	0.203
	4.06 2.18 1.29 0.152 0.89 4.70 1.70

All dimensions are in mm



ITEM	SYMBOL	SPECIFICATION (mm)	SPECIFICATION (inch)
CARRIER WIDTH	А	3.2 MAX.	0.126 MAX.
CARRIER LENGTH	В	7.8 MAX.	0.307 MAX.
CARRIER DEPTH	С	4.5 MAX.	0.177 MAX.
SPROCKET HOLE	đ	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	Р	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	Т	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.

Notes GS1A/M1 - GS1M/M7

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## **Disclaimer**

The product information and the selection guides facilitate selection of the CDIL's Discrete Semiconductor Device(s) best suited for application in your product(s) as per your requirement. It is recommended that you completely review our Data Sheet(s) so as to confirm that the Device(s) meet functionality parameters for your application. The information furnished in the Data Sheet and on the CDIL Web Site/CD are believed to be accurate and reliable. CDIL however, does not assume responsibility for inaccuracies or incomplete information. Furthermore, CDIL does not assume liability whatsoever, arising out of the application or use of any CDIL product; neither does it convey any license under its patent rights nor rights of others. These products are not designed for use in life saving/support appliances or systems. CDIL customers selling these products (either as individual Discrete Semiconductor Devices or incorporated in their end products), in any life saving/support appliances or systems or applications do so at their own risk and CDIL will not be responsible for any damages resulting from such sale(s).

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GS1A/M1\_GS1M/M7REV\_1140503D