

## Excellent Integrated System Limited

Stocking Distributor

Click to view price, real time Inventory, Delivery & Lifecycle Information:

[Comchip Technology](#)

[CGRB201-G](#)

For any questions, you can email us directly:

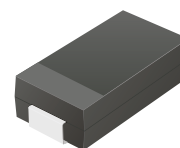
[sales@integrated-circuit.com](mailto:sales@integrated-circuit.com)

## SMD General Purpose Rectifiers



# CGRB201-G Thru. CGRB207-G

**Glass Passivated Type**  
**Reverse Voltage: 50 to 1000 Volts**  
**Forward Current: 2.0 Amp**  
**RoHS Device**

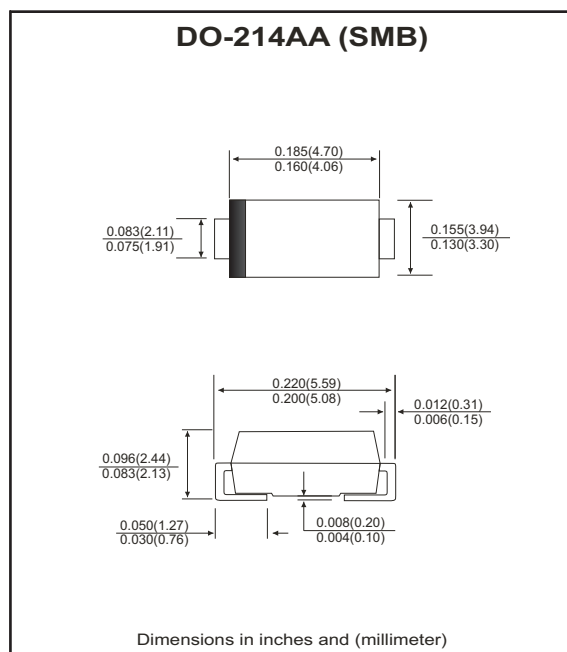


### Features

- Ideal for surface mount applications.
- Easy pick and place.
- Plastic package has Underwriters Lab. flammability classification 94V-0.
- Built in strain relief.
- High surge current capability.

### Mechanical data

- Case: JEDEC DO-214AA, molded plastic.
- Terminals: solderable per MIL-STD-750, method 2026.
- Polarity: Color band denotes cathode end.
- Approx. weight: 0.093 grams



### Maximum Ratings and Electrical Characteristics

Parameter	Symbol	CGRB 201-G	CGRB 202-G	CGRB 203-G	CGRB 204-G	CGRB 205-G	CGRB 206-G	CGRB 207-G	Units
Max. repetitive peak reverse voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Max. DC blocking voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Max. RMS voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Peak surge forward current, 8.3ms single half sine-wave superimposed on rate load (JEDEC method)	$I_{FSM}$	60							A
Max. average forward current	$I_o$	2.0							A
Max. instantaneous forward voltage at 2.0A	$V_F$	1.1							V
Max. DC reverse current at $T_A=25\text{ }^\circ\text{C}$ rated DC blocking voltage $T_A=125\text{ }^\circ\text{C}$	$I_R$	5.0 100							$\mu\text{A}$
Max. thermal resistance (Note 1)	$R_{\theta JL}$	16							$^\circ\text{C/W}$
Max. operating junction temperature	$T_J$	150							$^\circ\text{C}$
Storage temperature	$T_{STG}$	-55 to +150							$^\circ\text{C}$

Notes: 1. Thermal resistance from junction to lead mounted on P.C.B. with 8.0×8.0 mm square (0.13mm thick) land area.

# SMD General Purpose Rectifiers



## RATING AND CHARACTERISTIC CURVES (CGRB201-G thru CGRB207-G)

Fig.1 Reverse Characteristics

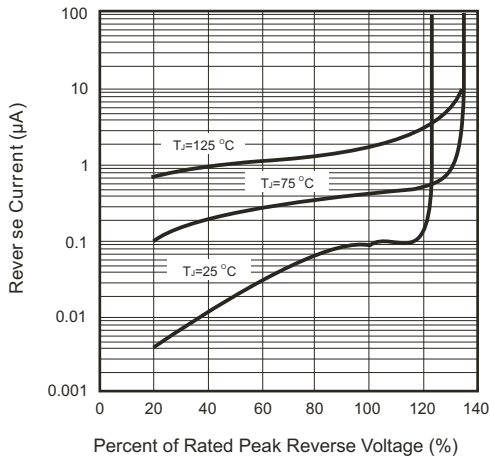


Fig.2 Forward Characteristics

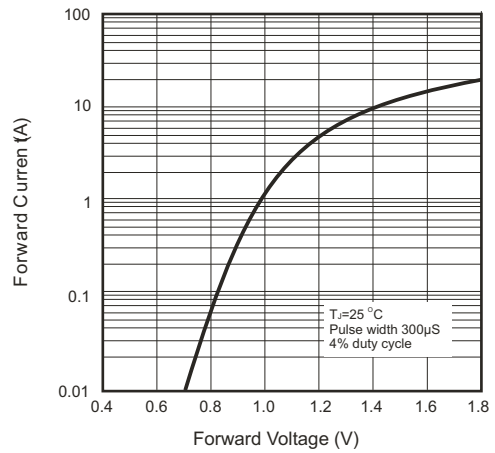


Fig.3 Junction Capacitance

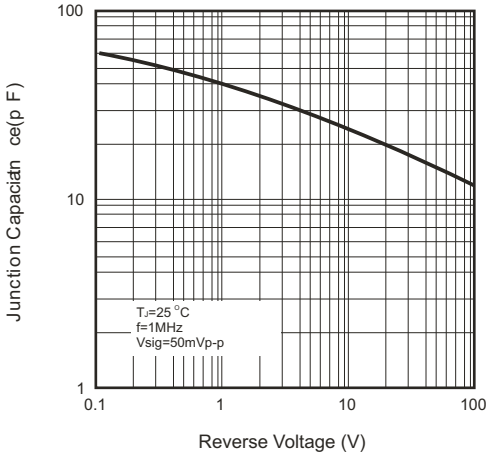


Fig.4 Current Derating Curve

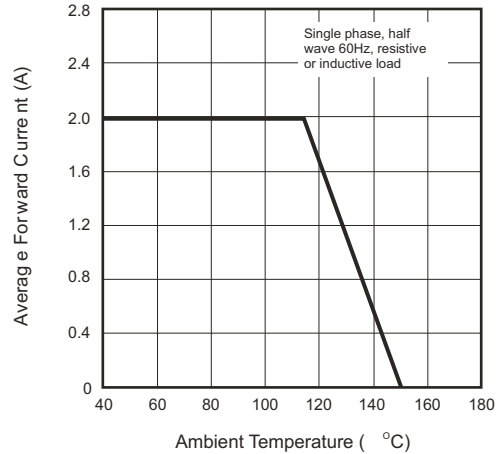
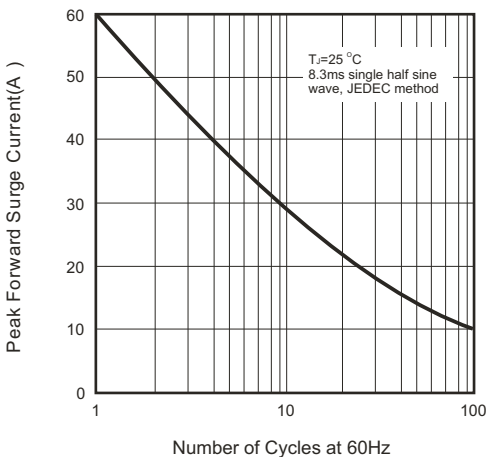


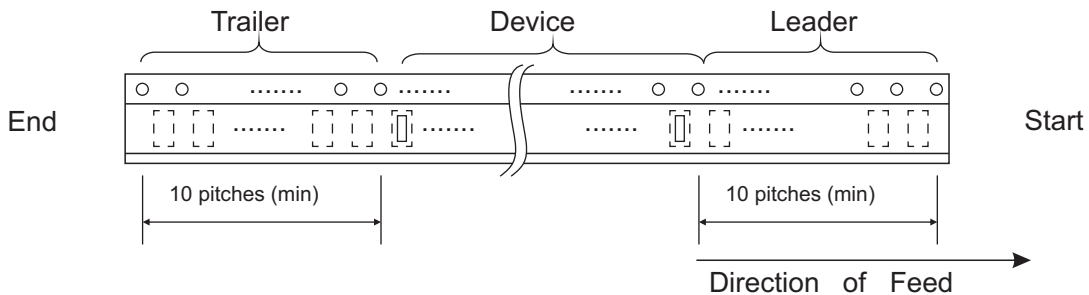
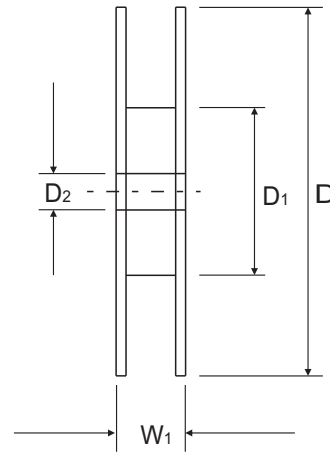
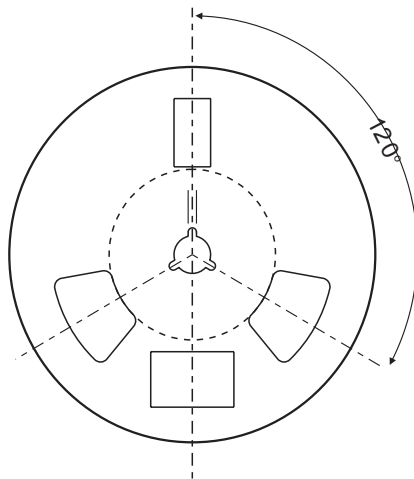
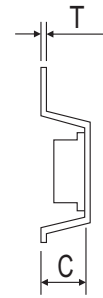
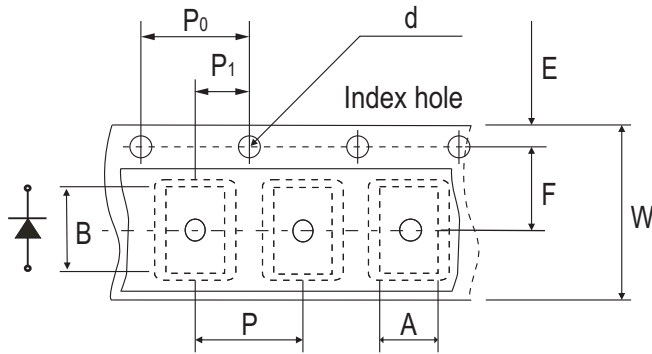
Fig.5 Non-repetitive Forward Surge Current



# SMD General Purpose Rectifiers



## Reel Taping Specification



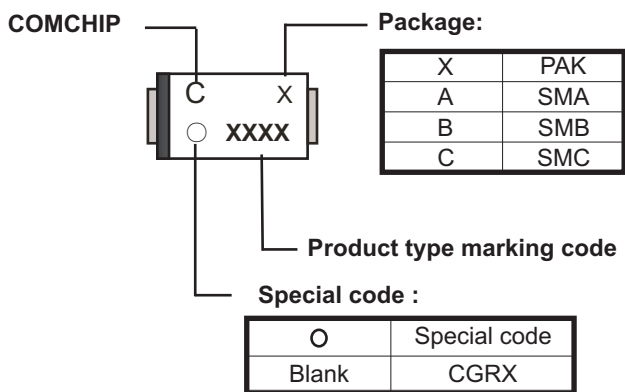
DO-214AA (SMB)	SYMBOL	A	B	C	d	D	D1	D2	E
	(mm)	4.00 MAX.	5.90 MAX.	3.00 MAX.	$1.50 \pm 0.10_{DIA}$	$330 \pm 2.00$	50.0 MIN.	$13.50 \pm 1.0$	$1.75 \pm 0.1$
	(inch)	0.157 MAX.	0.232 MAX.	0.118 MAX.	$0.059 \pm 0.004_{DIA}$	$12.99 \pm 0.079$	1.969 MIN.	$0.531 \pm 0.039$	$0.069 \pm 0.004$

DO-214AA (SMB)	SYMBOL	F	P	P0	P1	T	W	W1	W2
	(mm)	$5.50 \pm 0.05$	$8.00 \pm 0.10$	$4.00 \pm 0.10$	$2.00 \pm 0.05$	0.60 MAX	$12.0 \pm 0.30$	18.4 MAX.	14.4 MAX.
	(inch)	$0.217 \pm 0.002$	$0.315 \pm 0.004$	$0.157 \pm 0.004$	$0.079 \pm 0.004$	$0.236 \pm 0.004$	$0.472 \pm 0.012$	0.724 MAX	0.566 MAX

## SMD General Purpose Rectifiers

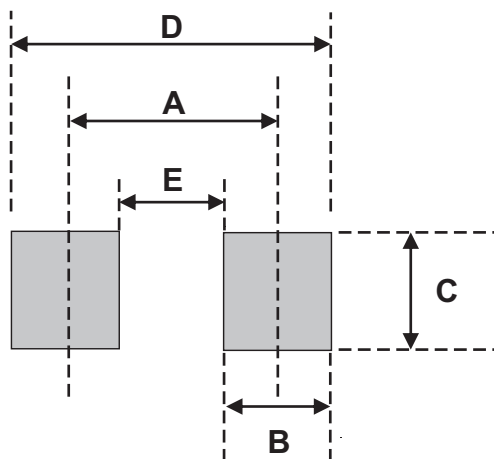
### Marking Code

Part Number	Marking Code
CGRB201-G	201
CGRB202-G	202
CGRB203-G	203
CGRB204-G	204
CGRB205-G	205
CGRB206-G	206
CGRB207-G	207



### Suggested PAD Layout

SIZE	SMB	
	(mm)	(inch)
A	4.30	0.169
B	2.50	0.098
C	2.30	0.091
D	6.80	0.268
E	1.80	0.071



### Standard Packaging

Case Type	Qty Per Reel	Reel Size
	(Pcs)	(inch)
DO-214AA (SMB)	3,000	13