



# THE DATASHEET OF CGRB302-G

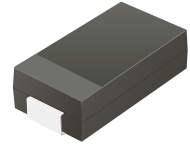


## CGRB301-G Thru. CGRB307-G

Reverse Voltage: 50 to 1000 Volts

Forward Current: 3.0 Amp

RoHS Device

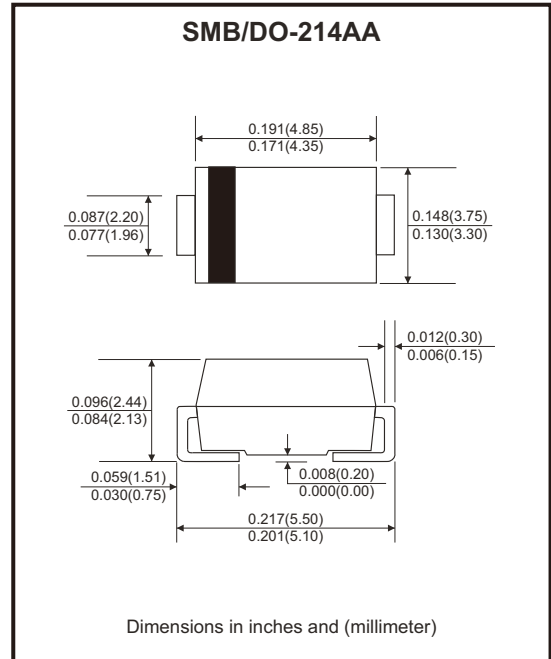


### Features

- Glass passivated chip.
- Low forward voltage.
- High current capability.
- High reliability.
- High surge current capability.

### Mechanical data

- Case: JEDEC DO-214AA, molded plastic.
- Epoxy: UL 94V-0 rate flame retardant.
- Lead: Solderable per MIL-STD-750, method 2026.
- Polarity: Color band denotes cathode end.
- Mounting position: Any.



### Circuit Diagram



### Maximum Ratings and Electrical Characteristics (T<sub>A</sub>=25°C unless otherwise noted)

Parameter	Symbol	CGRB 301-G	CGRB 302-G	CGRB 303-G	CGRB 304-G	CGRB 305-G	CGRB 306-G	CGRB 307-G	Unit
Repetitive peak reverse voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
DC blocking voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
RMS voltage	V <sub>R</sub>	35	70	140	280	420	560	700	V
Average forward rectified current	I <sub>F</sub>	3							A
Maximum instantaneous forward voltage @I <sub>F</sub>	V <sub>F</sub>	1.15							V
Maximum DC reverse current	I <sub>R</sub>	10							μA
Operating and storage temperature range	T <sub>J</sub> , T <sub>STG</sub>	-55 to +150							°C

## Rating and Characteristic Curves (CGRB301-G Thru. CGRB307-G)

Fig.1 - Forward Current Derating Curve

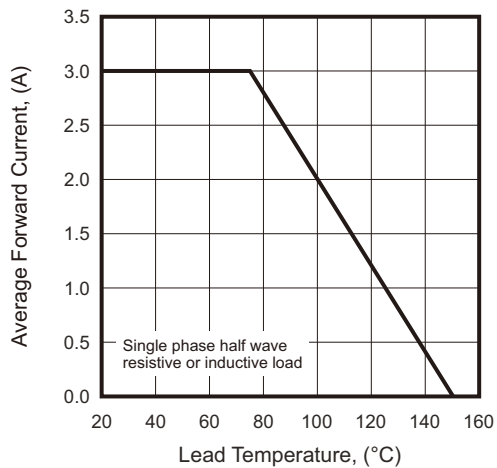


Fig.2 - Peak Forward Surge Current

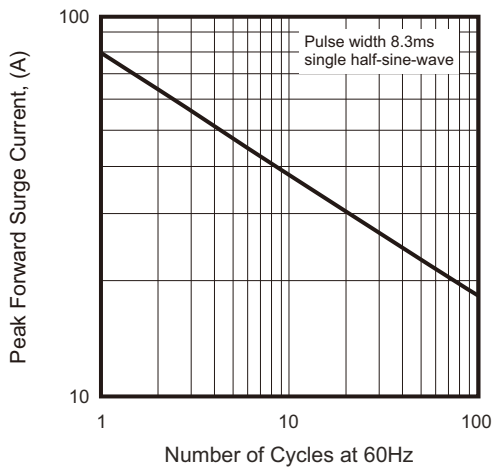


Fig.3 - Typical Forward Characteristics

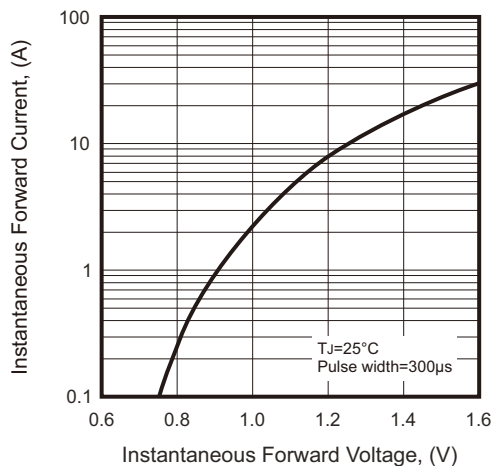
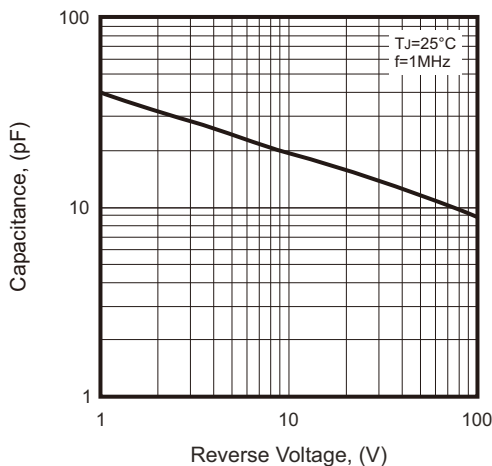
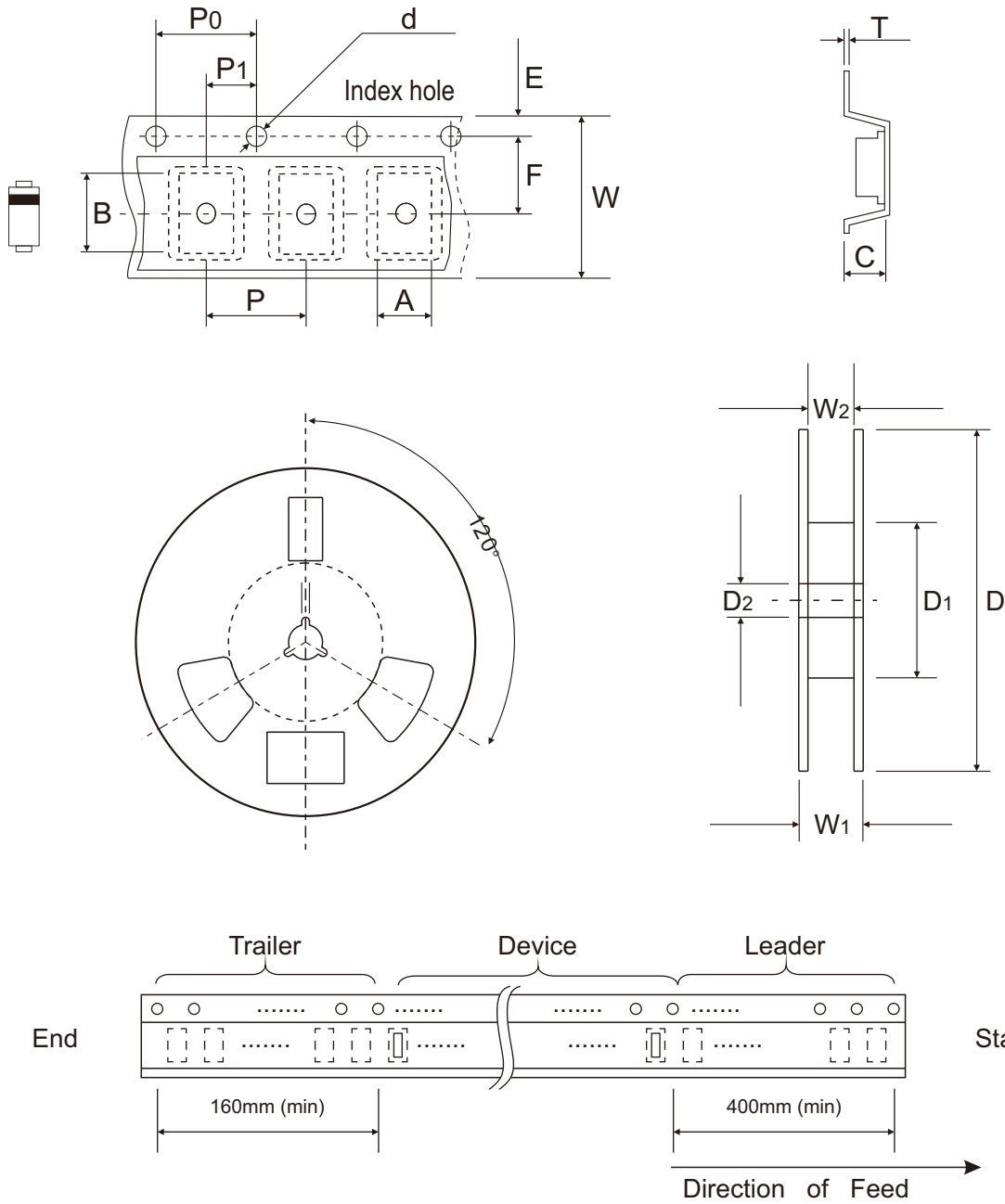


Fig.4 - Typical Junction Capacitance



## Reel Taping Specification



DO-214AA (SMB)	SYMBOL	A	B	C	d	D	D1	D2	E	
	(mm)	See Note 1				1.55 ± 0.05	330.00	50.00 (Min.)	13.00 + 0.50 - 0.20	1.75 ± 0.10
	(inch)	See Note 1				0.061 ± 0.002	12.992	1.969 (Min.)	0.512 + 0.020 - 0.008	0.069 ± 0.004

DO-214AA (SMB)	SYMBOL	F	P	P0	P1	T	W	W1	W2
	(mm)	5.50 ± 0.05	8.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.05	0.40 (Max.)	12.00 ± 0.10	18.40 (Max.)	12.40 + 2.00 - 0.00
	(inch)	0.217 ± 0.002	0.315 ± 0.004	0.157 ± 0.004	0.079 ± 0.002	0.016 (Max.)	0.472 ± 0.004	0.724 (Max.)	0.488 + 0.079 - 0.000

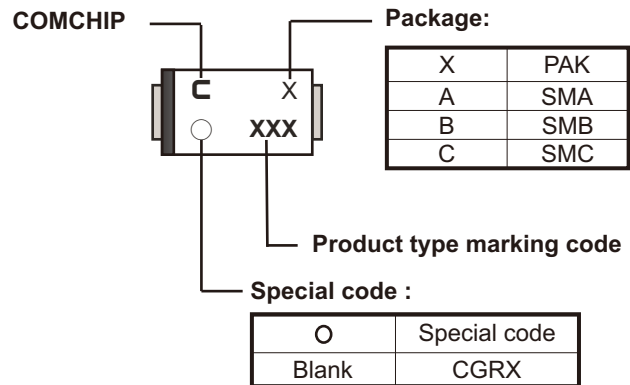
Notes: 1. A, B, and C the clearance between the component and the cavity must be within 0.5mm max. for 8mm tape and 12mm tape, 1.0mm max. for 16mm tape and 24mm tape.

Company reserves the right to improve product design, functions and reliability without notice.

REV:C

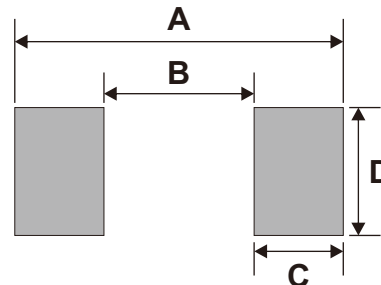
## Marking Code

Part Number	Marking Code
CGRB301-G	301
CGRB302-G	302
CGRB303-G	303
CGRB304-G	304
CGRB305-G	305
CGRB306-G	306
CGRB307-G	307



## Suggested PAD Layout

SIZE	DO-214AA(SMB)	
	(mm)	(inch)
A	5.60 REF	0.220 REF
B	2.16 MAX	0.085 MAX
C	1.52 MIN	0.060 MIN
D	2.18 MIN	0.086 MIN



## Standard Packaging

Case Type	REEL PACK	
	REEL ( pcs )	Reel Size (inch)
DO-214AA (SMB)	3,000	13

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