

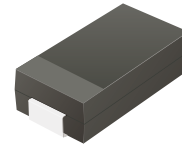
CGRB201-HF Thru. CGRB207-HF

Reverse Voltage: 50 to 1000 V

Forward Current: 2.0 A

RoHS Device

Halogen Free



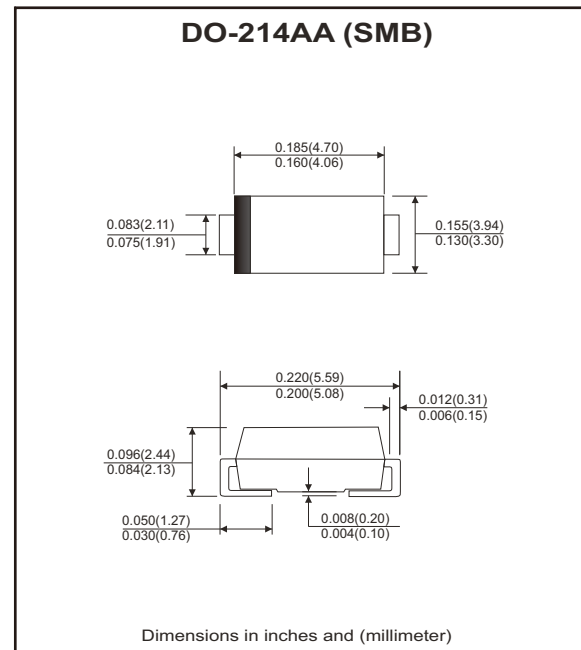
Features

- Glass passivated type.
- 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/SMB, molded plastic.
- Terminals: Solderable per MIL-STD-750, method 2026.
- Polarity: Color band denotes cathode end.

Circuit Diagram



Maximum Ratings and Electrical Characteristics

Parameter	Symbol	CGRB 201-HF	CGRB 202-HF	CGRB 203-HF	CGRB 204-HF	CGRB 205-HF	CGRB 206-HF	CGRB 207-HF	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							A
Max. instantaneous forward voltage at 2A	V_F	1.1							V
Max. DC reverse current at $T_A=25^{\circ}C$ rated DC blocking voltage $T_A=125^{\circ}C$	I_R	5 100							μA
Max. thermal resistance (Note 1)	$R_{\theta JL}$	16							$^{\circ}C/W$
Operating junction temperature range	T_J	-55 to +150							$^{\circ}C$
Storage temperature range	T_{STG}	-55 to +150							$^{\circ}C$

Notes: 1. Thermal resistance from junction to lead mounted on P.C.B. with 8.0x8.0mm square² (0.13mm thick) land area.

Typical Rating and Characteristic Curves (CGRB201-HF Thru. CGRB207-HF)

Fig.1- Reverse Characteristics

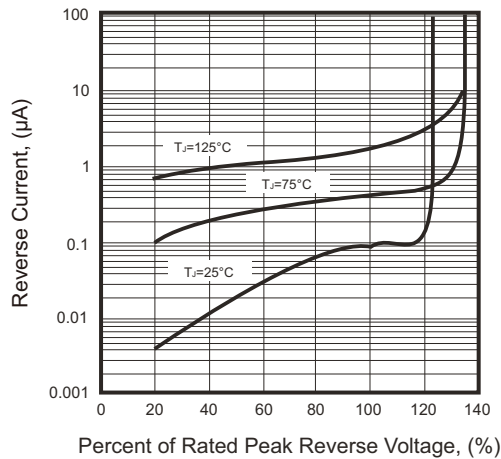


Fig.2 - Forward Characteristics

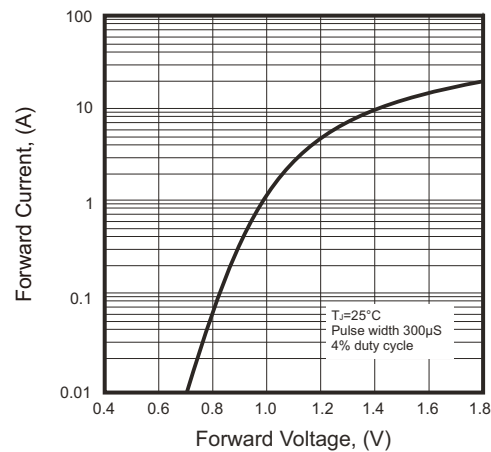


Fig.3 - Junction Capacitance

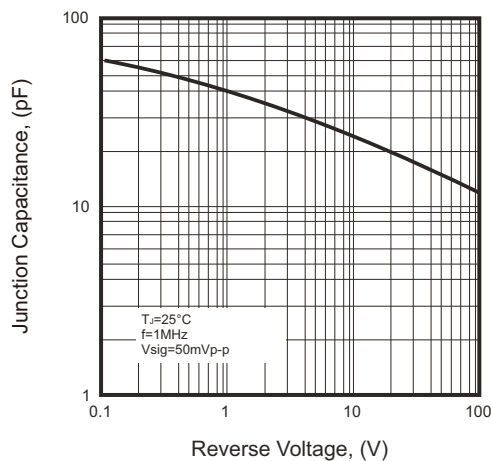


Fig.4 - Current Derating Curve

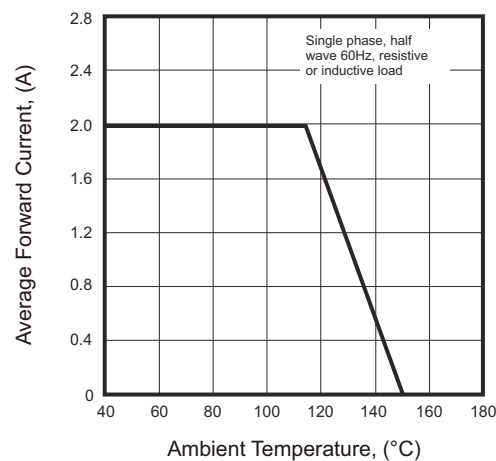
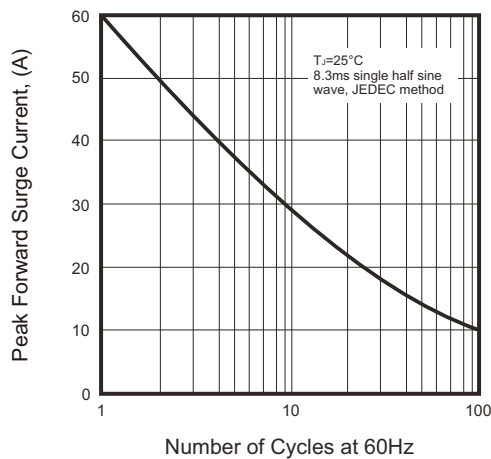
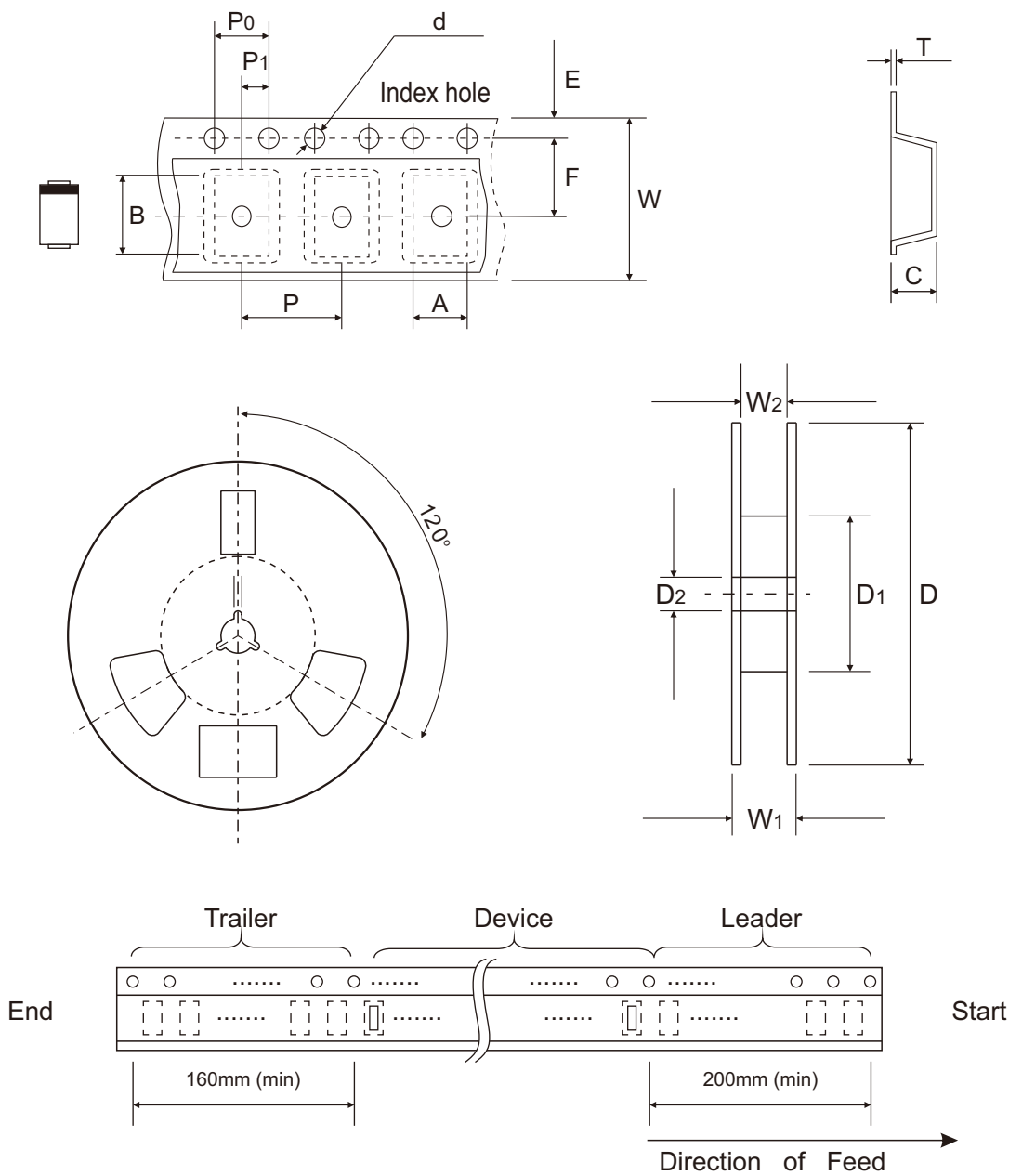


Fig.5 - Non-repetitive Forward Surge Current



Reel Taping Specification

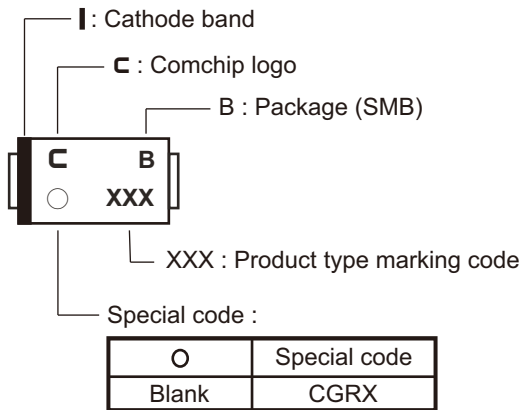


DO-214AA (SMB)	SYMBOL	A	B	C	d	D	D1	D2	E
	(mm)	4.00 Max.	5.90 Max.	3.00 Max.	1.50 ± 0.10	330.00 ± 2.00	50.00 Min.	13.50 ± 1.00	1.75 ± 0.10
	(inch)	0.157 Max.	0.232 Max.	0.118 Max.	0.059 ± 0.004	12.992 ± 0.079	1.969 Min.	0.531 ± 0.039	0.069 ± 0.004

DO-214AA (SMB)	SYMBOL	F	P	P ₀	P ₁	T	W	W ₁	W ₂
	(mm)	5.50 ± 0.05	8.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.05	0.60 Max.	12.00 ± 0.30	18.40 Max.	14.40 Max.
	(inch)	0.217 ± 0.002	0.315 ± 0.004	0.157 ± 0.004	0.079 ± 0.002	0.024 Max.	0.472 ± 0.012	0.724 Max.	0.567 Max.

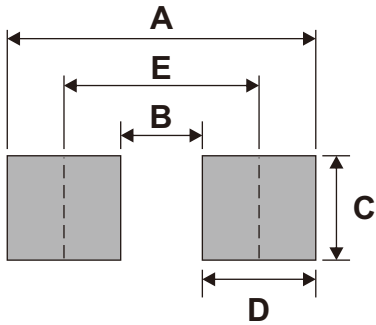
Marking Code

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



Suggested P.C.B. PAD Layout

SIZE	DO-214AA(SMB)	
	(mm)	(inch)
A	6.80	0.268
B	1.80	0.071
C	2.30	0.091
D	2.50	0.098
E	4.30	0.169



Standard Packaging

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