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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

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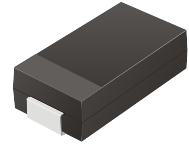
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CGRA4001-G Thru. CGRA4007-G

Glass Passivated Type
Reverse Voltage: 50 to 1000 Volts
Forward Current: 1.0 Amp
RoHS Device

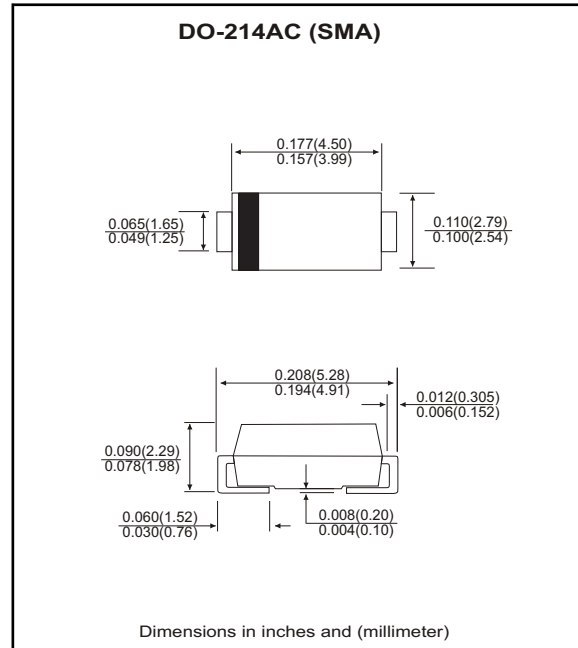


Features

- 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.
- Use in sensitive electronics protection against voltage transients induced by inductive load switching and lighting on ICs, MOSFET, signal lines of sensor units for consumer, computer, industrial, automotive and telecommunication.

Mechanical data

- Case: JEDEC DO-214AC, molded plastic.
- Terminals: solderable per MIL-STD-750, method 2026.
- Polarity: Color band denotes cathode end.
- Approx. weight: 0.063 grams



Maximum Ratings and Electrical Characteristics

Parameter	Symbol	CGRA 4001-G	CGRA 4002-G	CGRA 4003-G	CGRA 4004-G	CGRA 4005-G	CGRA 4006-G	CGRA 4007-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) $T_L=90^{\circ}C$	I_{FSM}	30							A
Max. average forward current(see fig.1)	I_o	1.0							A
Max. instantaneous forward voltage at 1.0A	V_F	1.1							V
Max. DC reverse current at rated	I_R	5.0							μA
DC blocking voltage	I_R	50							
Typical Junction Capacitance (Note 1)	$R_{\theta JA}$	50							$^{\circ}C/W$
	$R_{\theta JL}$	90							
Typical Thermal Resistance(Note 2)	T_{rr}	1.8							μs
Max. operating junction temperature	T_J	-55 to +150							$^{\circ}C$
Storage temperature	T_{STG}	-55 to +150							$^{\circ}C$

Notes: 1. Thermal resistance from junction to ambient and from junction to lead mounted on 0.2x0.2"(5.0x5.0mm) copper pad areas.
 2. Reverse recovery test condition: $I_F=0.5A$, $I_R=1.0A$, $I_{RR}=0.25A$

Rating and Characteristic Curves (CGRA4001-G thru. CGRA4007-G)

Fig.1 - Forward Current Dearth Curve

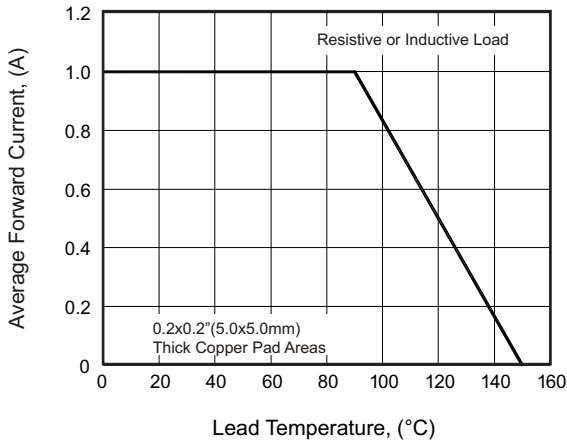


Fig.2 - Maximum NON-Repetitive peak Forward Surge Current

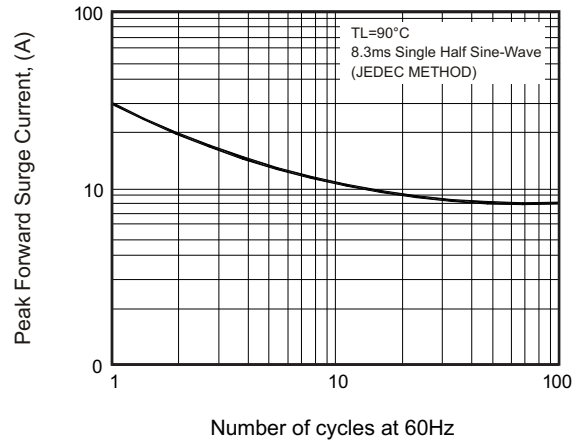


Fig.3 - Typical Instantaneous Forward Characteristics

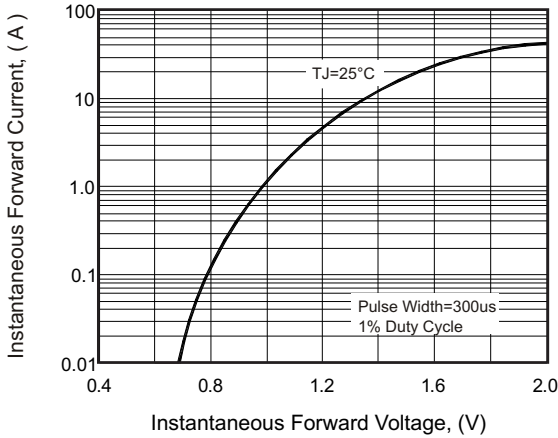


Fig.4 - Typical Reverse Characteristics

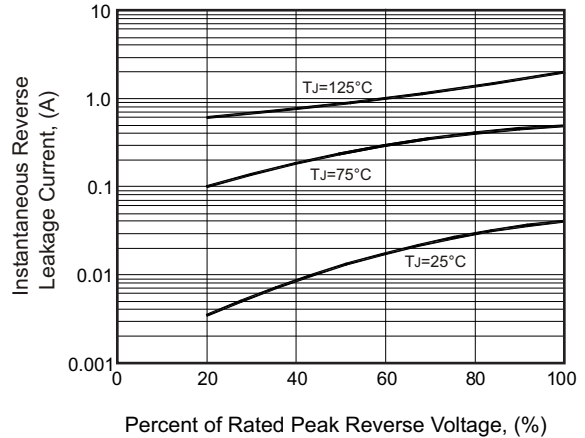


Fig.5 - Typical Junction Capacitance

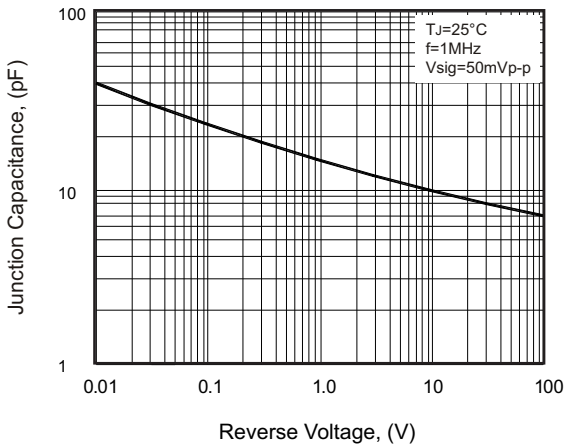
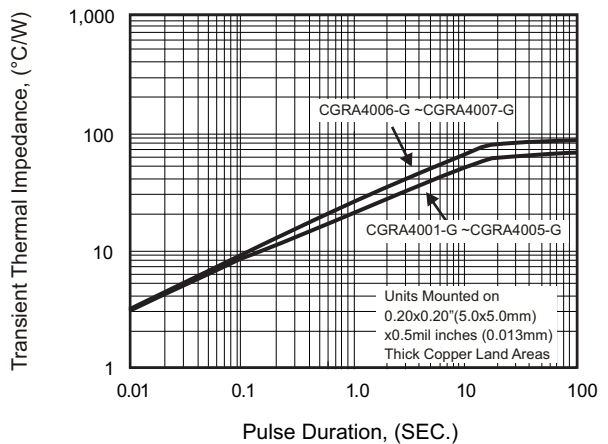
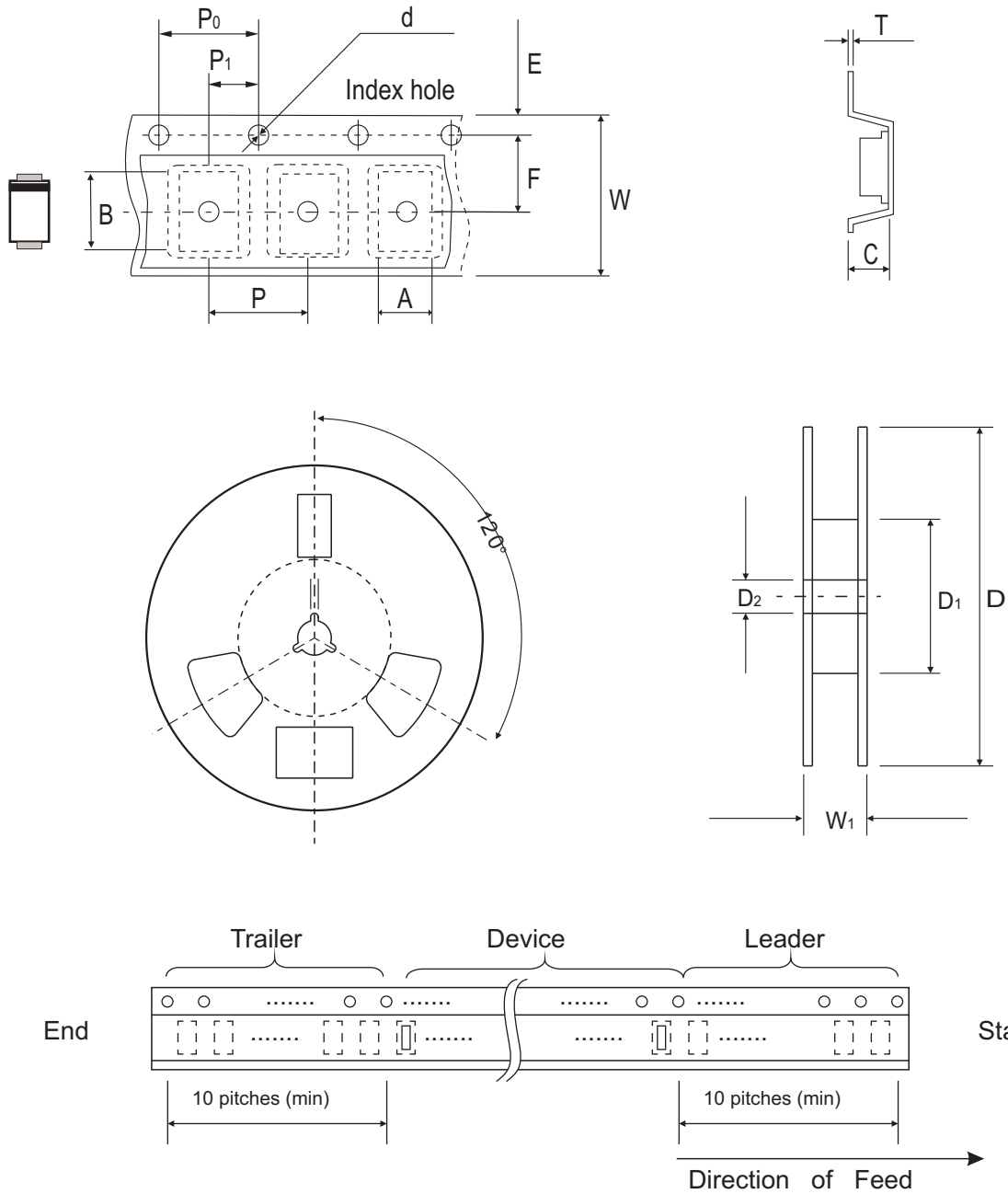


Fig.6 - Transient Thermal Impedance



Reel Taping Specification

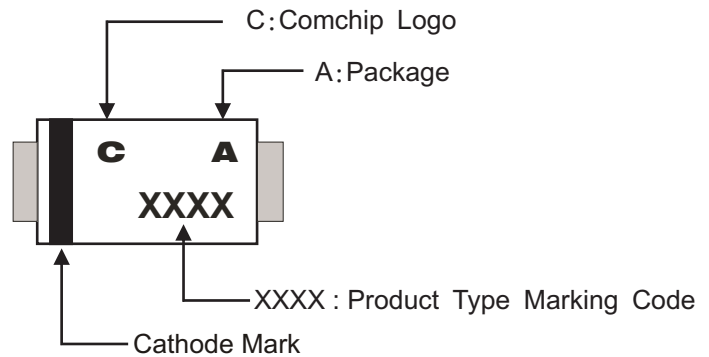


DO-214AC (SMA)	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	2.70 (max)	5.30 (max)	2.66 (max)	1.50 ± 0.10	330.00 ± 2.00	50.00 (min)	13.50 ± 1.00
	(inch)	0.106 (max)	0.209 (max)	0.105 (max)	0.059 ± 0.004	13.00 ± 0.079	1.969 (min)	0.531 ± 0.039

DO-214AC (SMA)	SYMBOL	E	F	P	P0	P1	W	W1
	(mm)	1.75 ± 0.10	5.50 ± 0.05	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.05	12.00 ± 0.30	18.40 (max)
	(inch)	0.069 ± 0.004	0.216 ± 0.002	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.002	0.472 ± 0.012	0.724 (max)

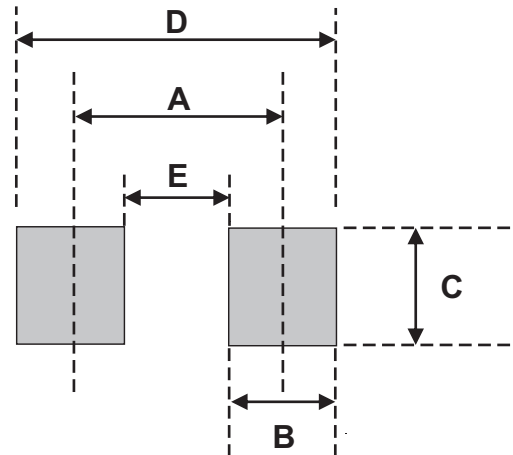
Marking Code

Part Number	Marking Code
CGRA4001-G	4001
CGRA4002-G	4002
CGRA4003-G	4003
CGRA4004-G	4004
CGRA4005-G	4005
CGRA4006-G	4006
CGRA4007-G	4007



Suggested PAD Layout

SIZE	DO-214AC (SMA)	
	(mm)	(inch)
A	4.50	0.177
B	1.50	0.059
C	3.60	0.142
D	6.00	0.236
E	3.00	0.118



Standard Packaging

Case Type	Qty Per Reel	Reel Size
	(Pcs)	(inch)
DO-214AC (SMA)	5,000	13