



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

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.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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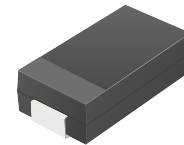
ACGRA4001-HF Thru. ACGRA4007-HF

Reverse Voltage: 50 to 1000 Volts

Forward Current: 1.0 Amp

RoHS Device

Halogen Free

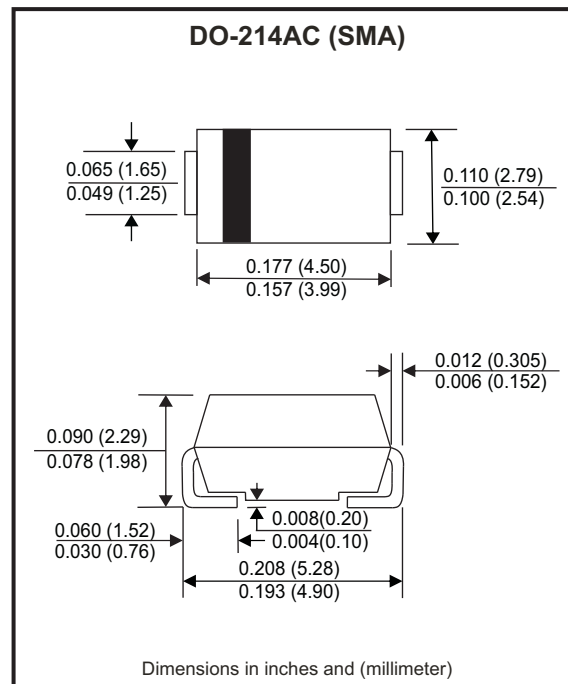


Features

- Glass Passivation Junction.
- High current capability.
- High surge current capability.
- Low reverse current.
- Comply with AEC-Q101

Mechanical data

- Case: DO-214AC / SMA, molded plastic.
- Epoxy: UL flammability classification rate 94V-0.
- Terminals: Lead free plating (Tin finish).
Solderable per MIL-STD-750, Method 2026.
- Polarity: Indicated by cathode band.
- Weight: 0.062 grams(approx.).



Circuit diagram



Maximum Ratings (at TA=25°C unless otherwise noted)

Parameter	Symbol	ACGRA 4001-HF	ACGRA 4002-HF	ACGRA 4003-HF	ACGRA 4004-HF	ACGRA 4005-HF	ACGRA 4006-HF	ACGRA 4007-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 forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	30							A
Max. average forward rectified current	I_F	1.0							A
Max. instantaneous forward voltage $I_F=1.0A @ 25^\circ C$	V_F	1.1							V
Max. DC reverse current at rated	I_R	5							μA
DC blocking voltage	I_R	50							
Typical junction capacitance (Note 1)	C_J	10							pF
Typical thermal resistance	$R_{\theta JC}$	70							$^\circ C/W$
Operating temperature range	T_J	-55 to +150							$^\circ C$
Storage temperature range	T_{STG}	-55 to +150							$^\circ C$

Notes: 1. Measured at 1.0MHZ and applied reverse voltage of 4.0V DC.

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

REV: B

Rating and Characteristic Curves (ACGRA4001-HF thru. ACGRA4007-HF)

Fig.1 - Typical Forward Current Derating Curve

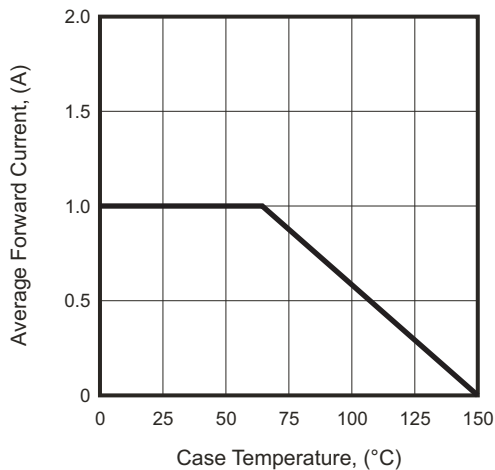


Fig.2 - Typical Forward Characteristics

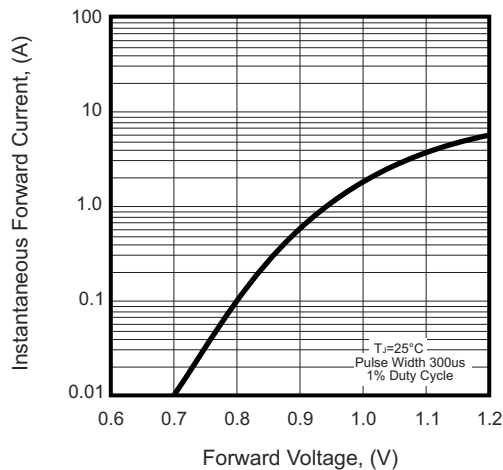


Fig.3 - Maximum Non-repetitive Forward Surge Current

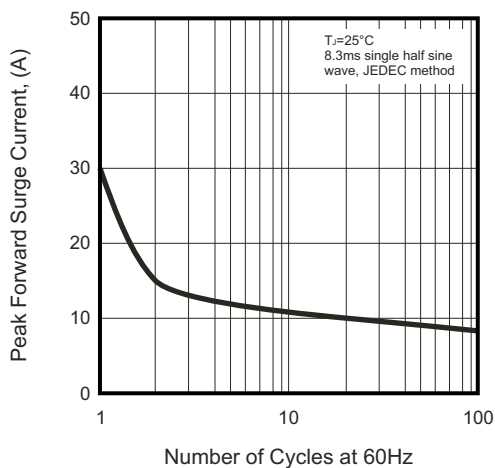


Fig.4 - Typical Reverse Characteristics

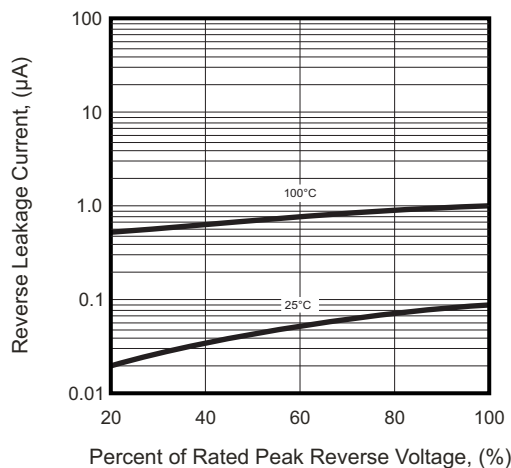
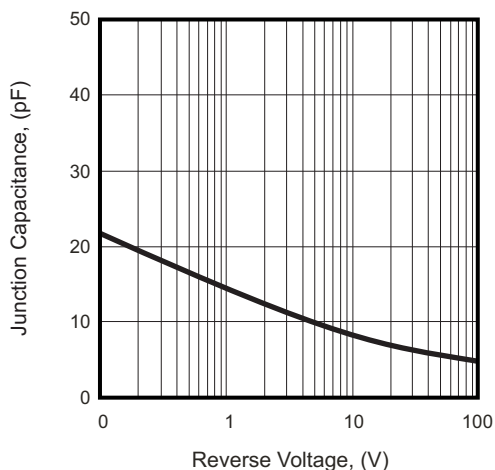


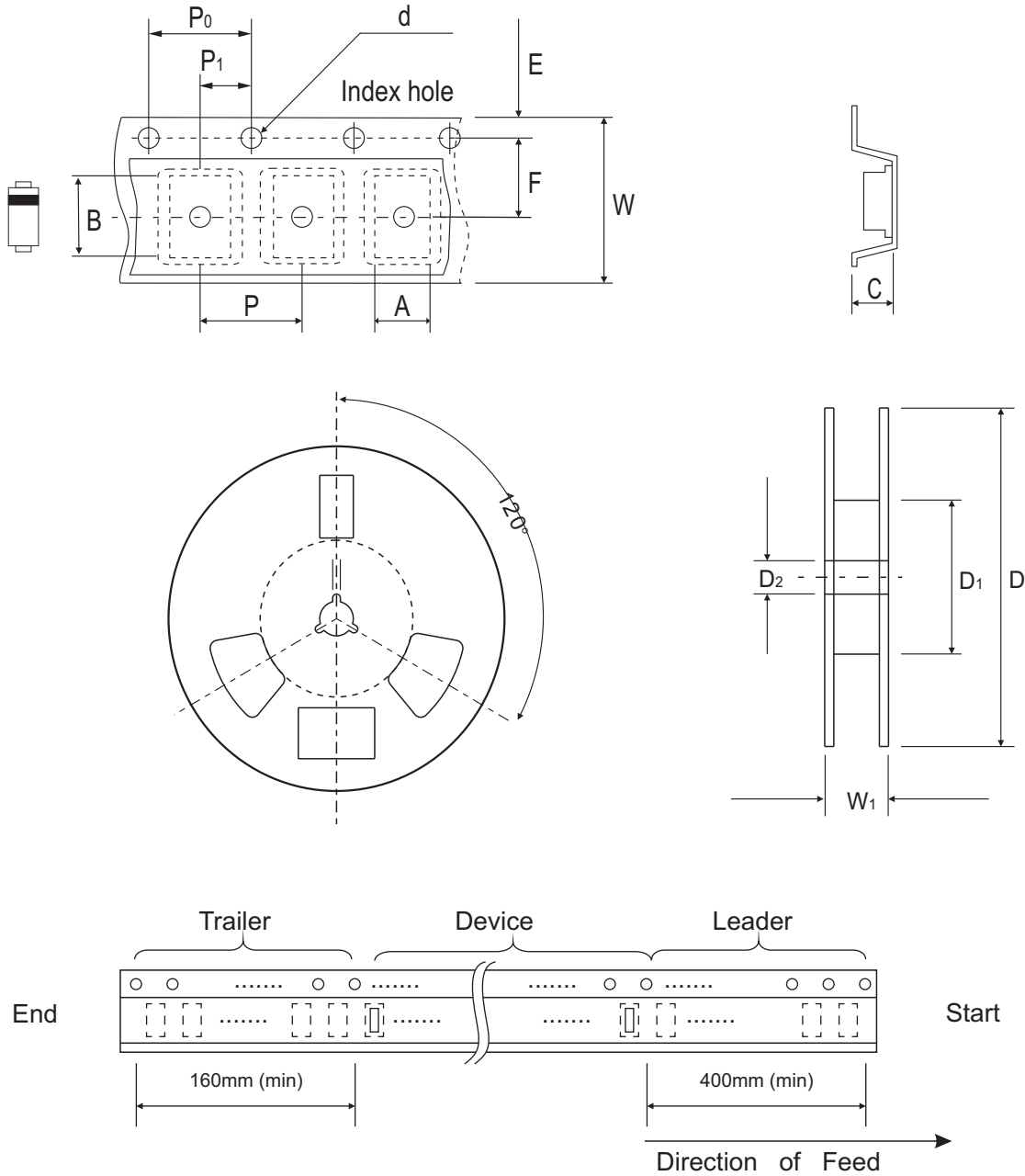
Fig.5 - Typical Junction Capacitance



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Reel Taping Specification



DO-214AC (SMA)	SYMBOL	A	B	C	d	D	D ₁	D ₂
	(mm)	2.90 MAX.	5.90 MAX.	2.66 MAX.	1.50 ± 0.10	330 ± 2.00	50 MIN.	13.50 ± 1.00
	(inch)	0.114 MAX.	0.232 MAX.	0.105 MAX.	0.059 ± 0.004	13.00 ± 0.079	1.969 MIN.	0.531 ± 0.039

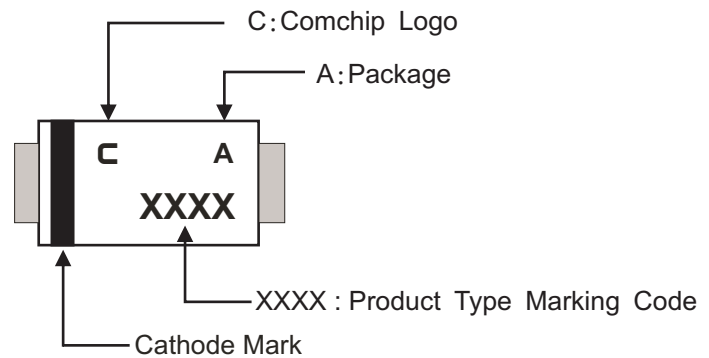
DO-214AC (SMA)	SYMBOL	E	F	P	P ₀	P ₁	W	W ₁
	(mm)	1.75 ± 0.10	5.50 ± 0.05	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.05	12.00 ± 0.30	18.40 MAX.
	(inch)	0.069 ± 0.004	0.217 ± 0.002	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.002	0.472 ± 0.012	0.724 MAX.

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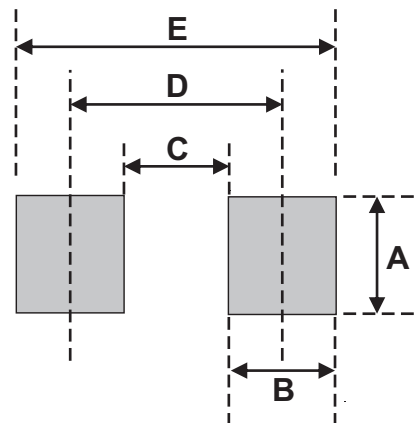
Marking Code

Part Number	Marking code
ACGRA4001-HF	4001
ACGRA4002-HF	4002
ACGRA4003-HF	4003
ACGRA4004-HF	4004
ACGRA4005-HF	4005
ACGRA4006-HF	4006
ACGRA4007-HF	4007



Suggested PAD Layout

SIZE	DO-214AC (SMA)	
	(mm)	(inch)
A	1.70	0.067
B	2.50	0.098
C	1.50	0.059
D	4.00	0.157
E	6.50	0.256



Note:

1. The pad layout is for reference purposes only.

Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
DO-214AC (SMA)	5,000	13