

ACGRCT302-HF

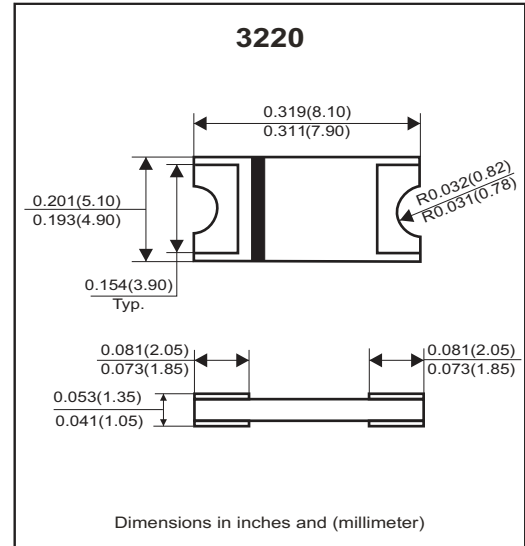
Glass Passivated Type

Reverse Voltage: 400Volts

Forward Current: 3.0 Amp

RoHS Device

Halogen Free



Features

- Glass passivated cavity-free junction.
- Lead less chip form, no lead damage.
- Low profile package.
- Plastic package has UL 94V-0.
- Comply with AEC-Q101

Mechanical data

- Case: Packed with FRP substrate and epoxy underfilled.
- Terminals: Pure Tin plated (Lead-Free), solderable per MIL-STD-750, method 2026.
- Polarity: Cathode Band, Laser marking.
- Weight: 0.144 grams (approx).

Circuit Diagram



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

Parameter	Symbol	Value	Unit
Repetitive peak reverse voltage	V_{RRM}	400	V
Peak forward surge current, 8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I_{FSM}	100	A
Average forward current	$I_{F(AV)}$	3.0	A
Operating junction temperature	T_J	-65 to +175	°C
Storage temperature	T_{STG}	-65 to +175	°C

Electrical Characteristics (at TA=25°C unless otherwise noted)

Parameter	Conditions	Symbol	MIN.	TYP.	MAX.	Unit
Forward voltage	$I_F = 3.0A$	V_F	-	0.96	1	V
Repetitive peak reverse current	$V_R = \text{Max. } V_{RRM}, T_A = 25^\circ C$	I_{RRM}	-	0.10	5	uA
Junction capacitance	$V_R = 4V, f = 1.0MHz$	C_J	-	25	-	pF

RATING AND CHARACTERISTIC CURVES (ACGRCT302-HF)

FIG.1 - Forward Current Derating Curve

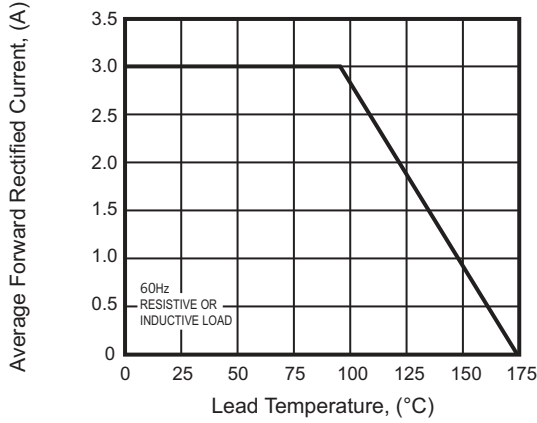


FIG.2 - Mximum Non-Repetitive Peak Forward Surge Current

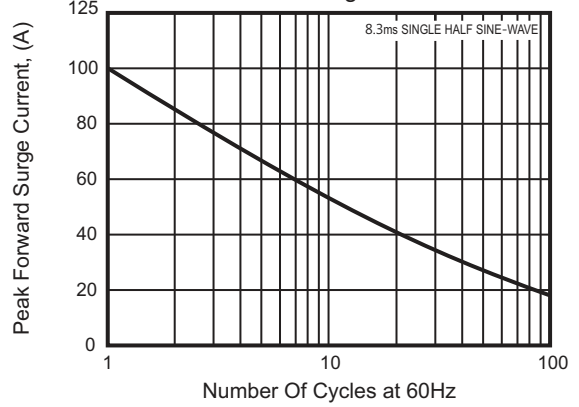


FIG.3 - Typical Instantaneous Forward Characteristics

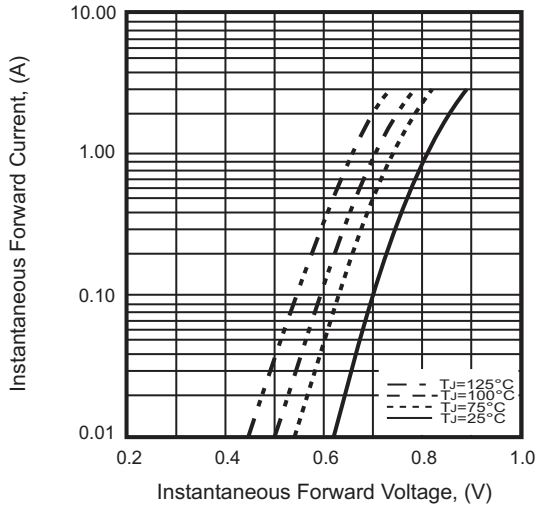


FIG.4 - Typical Reverse Characteristics

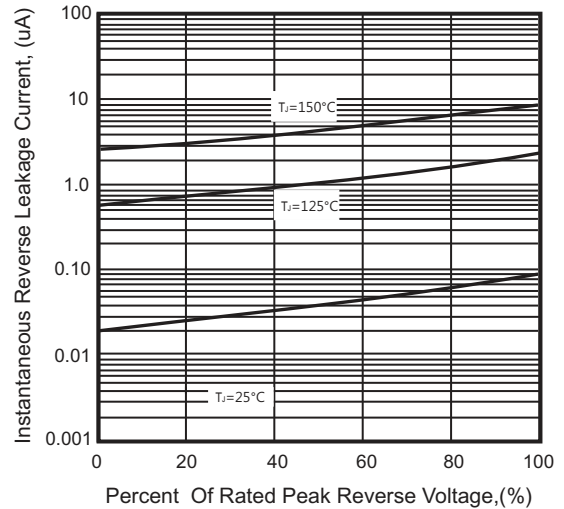
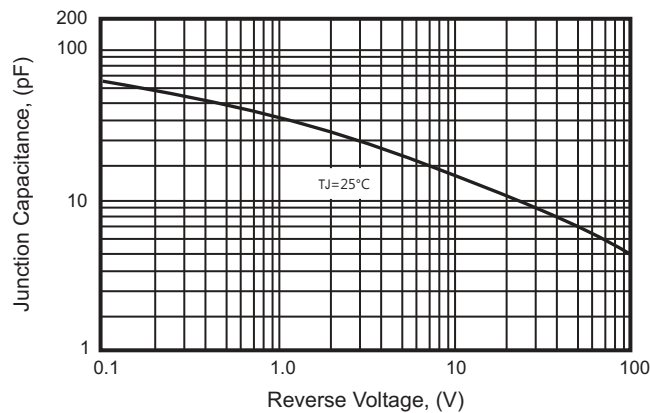
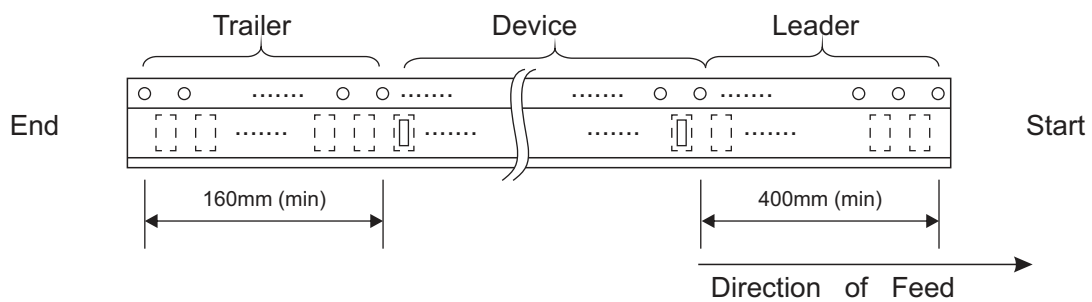
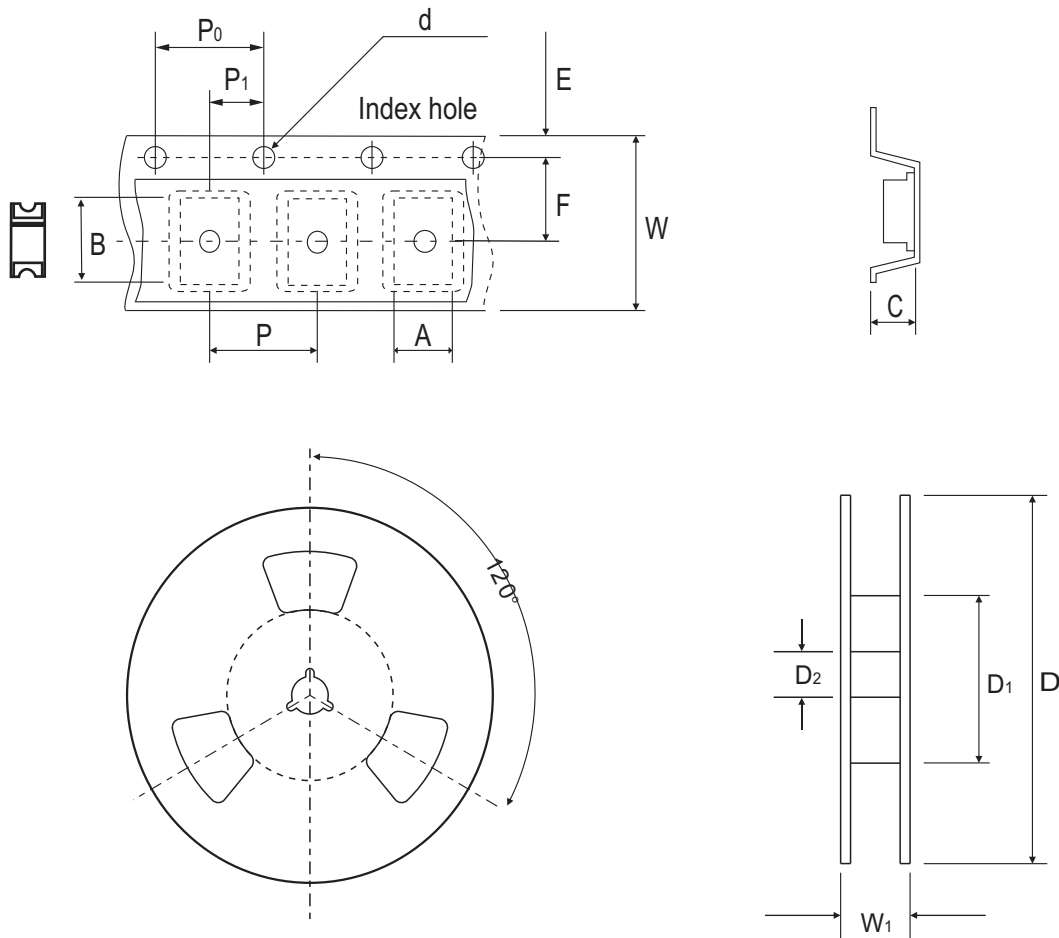


FIG.5 - Typical Junction Capacitance



Reel Taping Specification



3220	SYMBOL	A	B	C	d	D	D ₁	D ₂
	(mm)	5.56 ± 0.10	8.18 ± 0.10	2.16 ± 0.10	1.55 ± 0.05	330 ± 2.00	50.0 MIN.	13.0 ± 0.50
	(inch)	0.219 ± 0.004	0.322 ± 0.004	0.085 ± 0.004	0.061 ± 0.002	12.992 ± 0.079	1.969 MIN.	0.512 ± 0.020

3220	SYMBOL	E	F	P	P ₀	P ₁	W	W ₁
	(mm)	1.75 ± 0.10	7.50 ± 0.10	8.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.10	16.00 ± 0.30	22.70 MAX.
	(inch)	0.069 ± 0.004	0.295 ± 0.004	0.315 ± 0.004	0.157 ± 0.004	0.079 ± 0.004	0.630 ± 0.012	0.893 MAX.

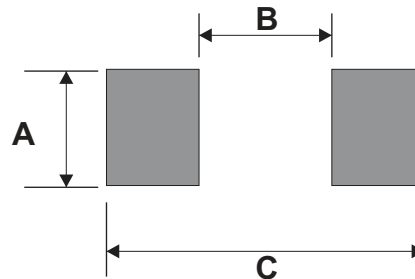
Marking Code

Part Number	Marking Code
ACGRCT302-HF	30G



Suggested PAD Layout

SIZE	3220	
	(mm)	(inch)
A	3.90MIN.	0.154MIN.
B	4.10MAX.	0.161MAX.
C	11.90REF.	0.469 REF.



Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
3220	3,000	13