



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!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

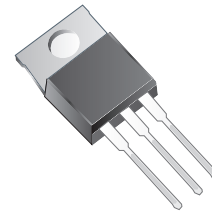


## C3045CT-G

**Voltage: 45 V**

**Current: 30 A**

**RoHS Device**

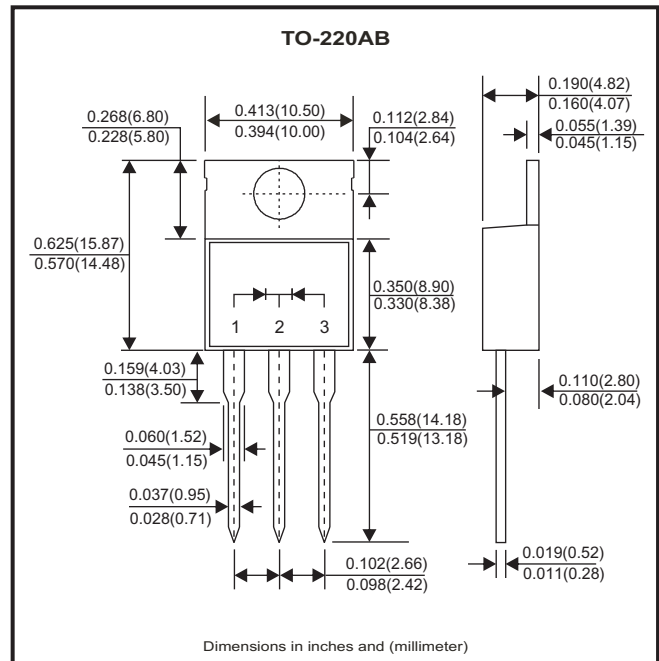


### Features

- Low forward voltage drop
- Excellent high temperature stability
- Fast switching capability

### Mechanical Data

- Epoxy: UL 94-V0 rate flame retardant.
- Case: JEDEC TO-220AB, molded plastic body.
- Polarity: Solder plated, Solderable per MIL-STD-750, Method 2026.
- Polarity: As marked on the body.
- Mounting position: Any
- Weight: 2.25 grams(Approx.).



### Maximum Rating and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.  
 Single phase, half wave, 60Hz, resistive or inductive load.  
 For capacitive load derate current by 20%.

Parameter	Conditions	Symbol	Value	Unit
Peak repetitive reverse voltage		$V_{RRM}$	45	V
Working peak reverse voltage		$V_{RWM}$	45	V
DC blocking voltage		$V_{RM}$	45	V
Forward rectified current (total device)		$I_o$	30	A
Forward surge current (per diode)	8.3ms single half sine-wave superimposed on rate load (JEDEC method)	$I_{FSM}$	150	A
Peak repetitive reverse surge current (per diode)	2us - 1KHz	$I_{RRM}$	2	A
Thermal resistance (1) (per diode)	Junction to Case	$R_{\theta JC}$	2	°C/W
Operating temperature range		$T_J$	-65 to +150	°C
Storage temperature range		$T_{STG}$	-65 to +150	°C

Parameter	Conditions	Symbol	Min.	Typ.	Max.	Unit
Forward voltage drop (per diode)	$I_F = 15A, T_J = 25^\circ C$	$V_F$			550	mV
	$I_F = 15A, T_J = 125^\circ C$				500	
Reverse current (per diode)	$V_R = V_{RRM}, T_J = 25^\circ C$	$I_R$			0.5	mA
	$V_R = V_{RRM}, T_J = 125^\circ C$				100	

NOTES:

1. Thermal resistance from junction to case per leg, with heatsink size(1.35" x 0.95" x 0.18") Al-plate.

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

REV:A

## Rating and Characteristic Curves ( C3045CT-G )

Fig.1 - Instantaneous Forward Characteristics (per diode)

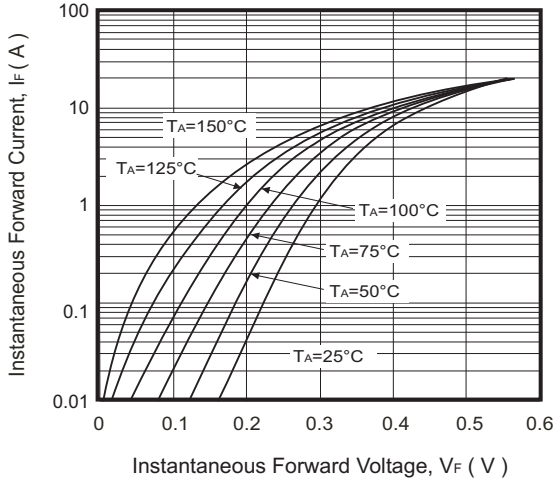


Fig.2 - Forward Current Derating Curve (Per Diode)

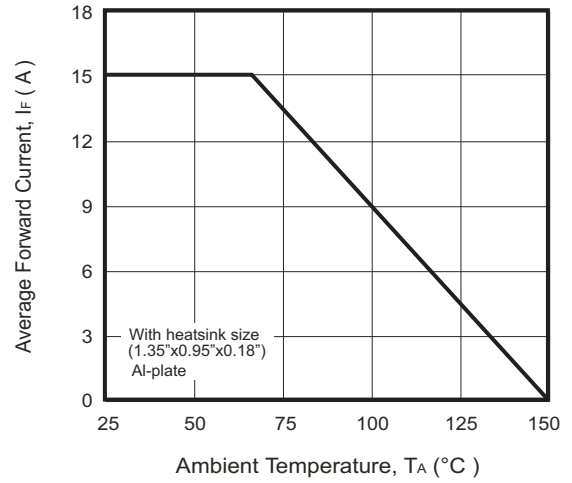
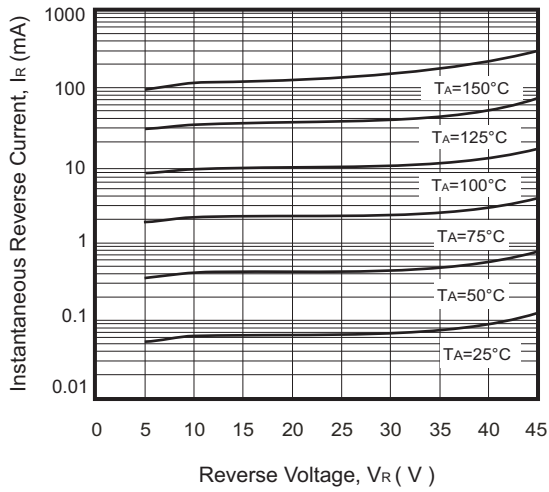
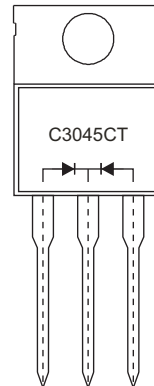


Fig.3 - Reverse Characteristics (per diode)



## Marking Code

Part Number	Marking code
C3045CT-G	C3045CT



## Standard Packaging

Case Type	TUBE PACK		
	TUBE ( pcs )	BOX ( pcs )	CARTON ( pcs )
TO-220AB	50	1,000	5,000