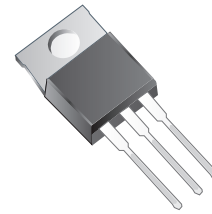


## C3045CT-G

**Voltage: 45 V**

**Current: 30 A**

**RoHS Device**

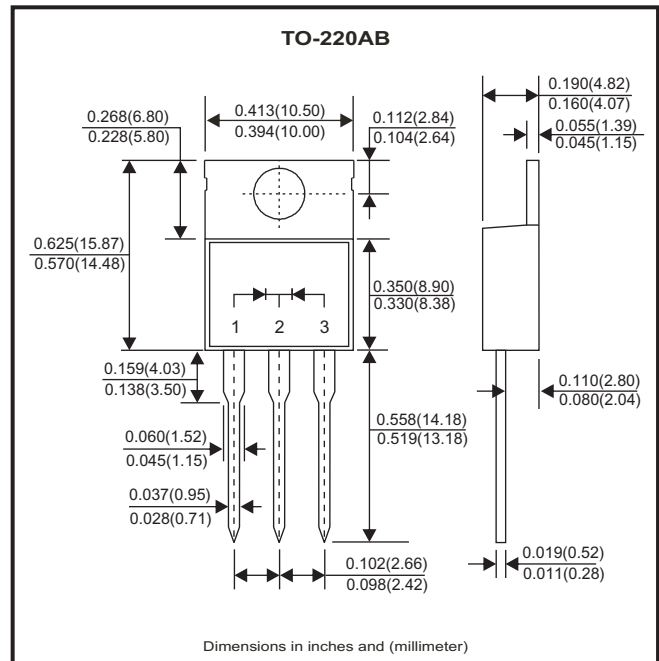


### Features

- 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)

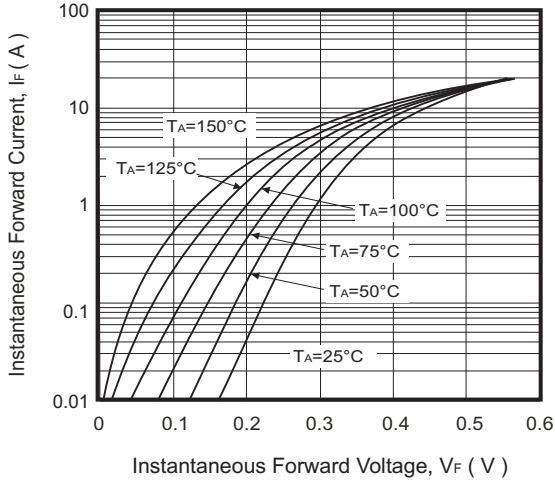


Fig.2 - Forward Current Derating Curve (Per Diode)

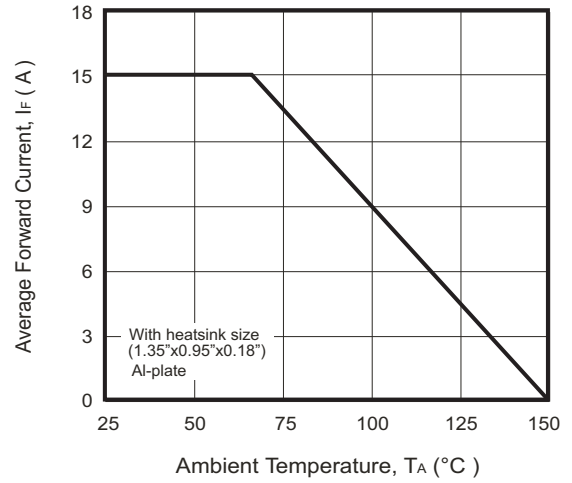
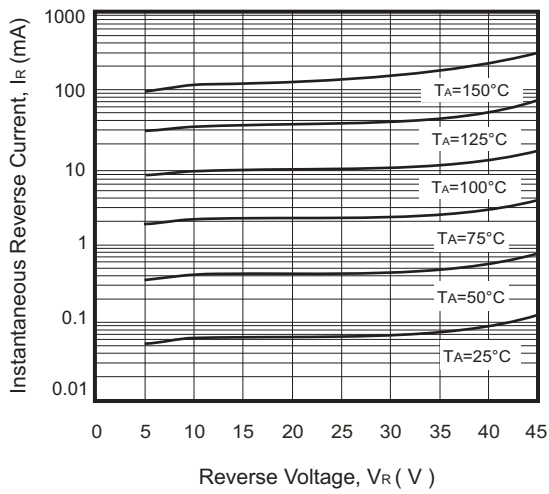
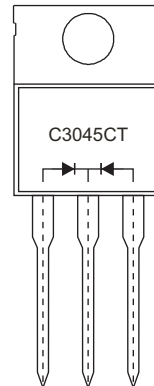


Fig.3 - Reverse Characteristics (per diode)



## 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