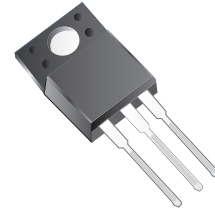


CGRF40L100CT-G

Reverse Voltage: 100 Volts

Forward Current: 40 Amp

RoHS Device



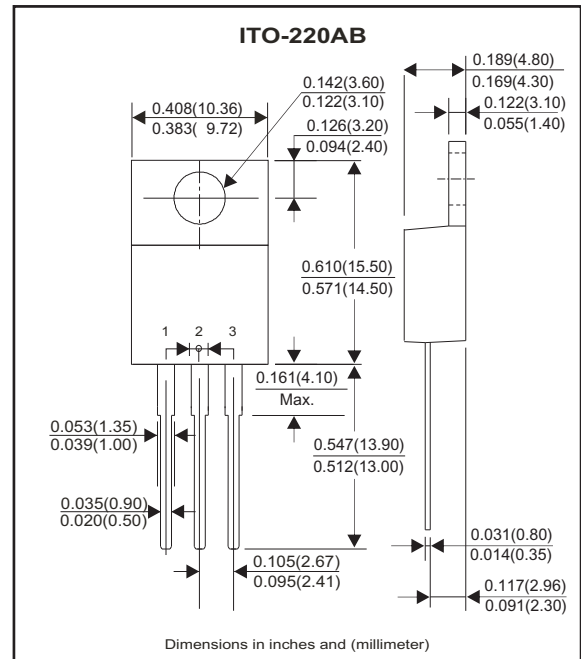
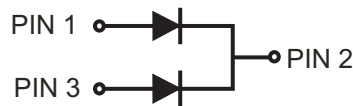
Features

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

Mechanical data

- Epoxy: UL 94-V0 rated flame retardant.
- Case: JEDEC ITO-220AB molded plastic body.
- Terminals: Solder plated, solderable per MIL-STD-750, method 2026.
- Polarity: As marked.
- Mounting position: Any
- Weight: 2.25 grams(approx).

Circuit Diagram



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

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}	100	V
Working peak reverse voltage		V_{RWM}	100	V
DC blocking voltage		V_{RM}	100	V
Forward rectified current (total device)		I_o	40	A
Forward surge current(per diode)	8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I_{FSM}	320	A
Peak repetitive reverse surge current (per diode)	2us - 1KHz	I_{RRM}	1	A
Thermal resistance (1) (per diode)	Junction to Case	$R_{\theta JC}$	4	°C/W
Operating temperature range		T_J	-55 to +150	°C
Storage temperature range		T_{STG}	-55 to +150	°C

Notes: 1. Thermal resistance from junction to case per leg, with heatsink size(1.35"x0.95"x0.18") Al-plate.

Parameter	Conditions	Symbol	Min.	Typ.	Max.	Unit
Forward voltage drop(per diode)	$I_F = 20A, T_J = 25^\circ C$	V_F			800	mV
	$I_F = 20A, T_J = 125^\circ C$			640	700	
Reverse current(per diode)	$V_R = V_{RRM}, T_J = 25^\circ C$	I_R			0.2	mA
	$V_R = V_{RRM}, T_J = 125^\circ C$				30	

Rating and Characteristic Curves (CGRF40L100CT-G)

Fig.1- Forward Current Derating Curve (Per Diode)

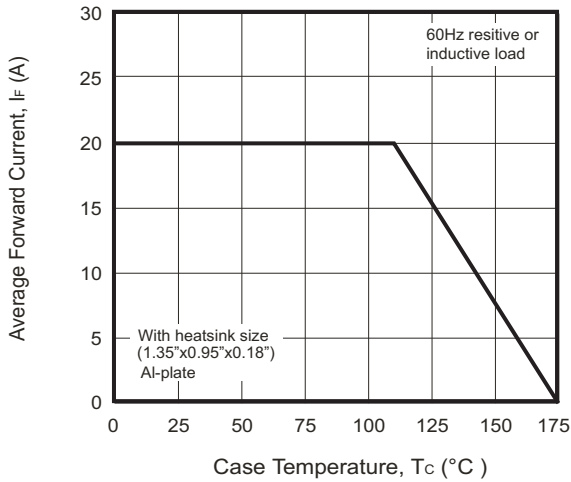


Fig.2 - Instantaneous Forward Characteristics (Per Diode)

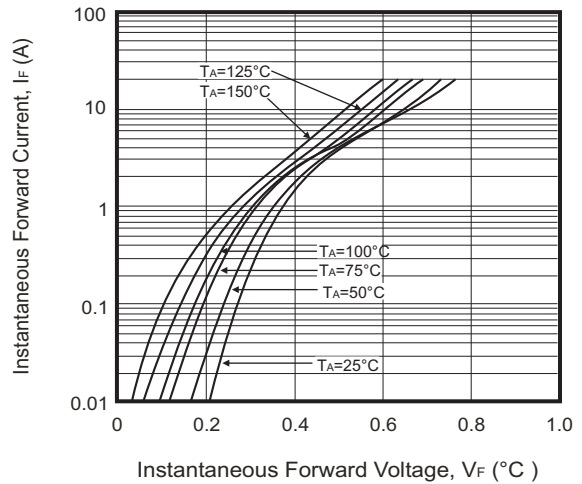
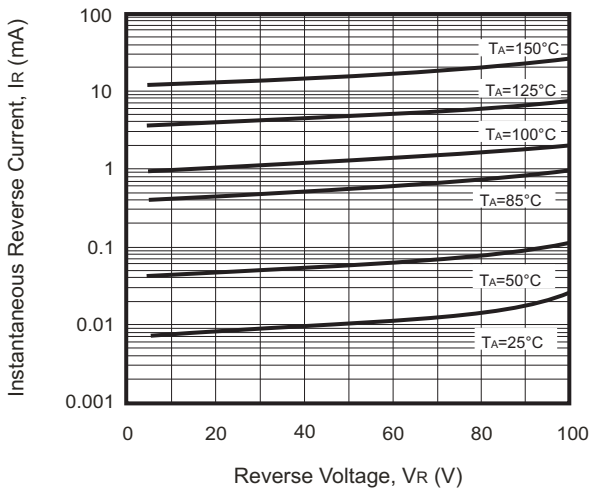
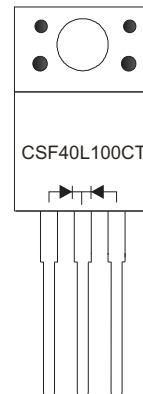


Fig.3 - Reverse Characteristics (per diode)



Marking Code

Part Number	Marking code
CGRF40L100CT-G	CSF40L100CT



Standard Packaging

Case Type	TUBE PACK	
	TUBE (pcs)	BOX (pcs)
ITO-220AB	50	4,000