CF4060CT

Chip Integration Technology Corporation

40A High Power Schottky Barrier Rectifier

Main Product Characteristics

$I_{F(AV)}$	2 X 20A
V_{RRM}	60V
T_J	125°C
$V_{F(Typ)}$	0.39V

■ Features

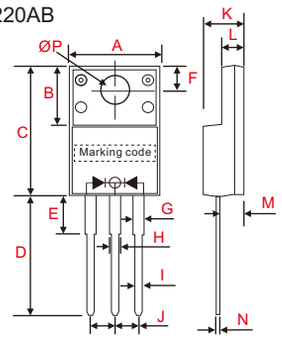
- Low forward voltage drop.
- Excellent high temperature stability.
- Fast switching capability.
- Lead-free parts meet environmental standards of MIL-STD-19500 /228

■ Mechanical data

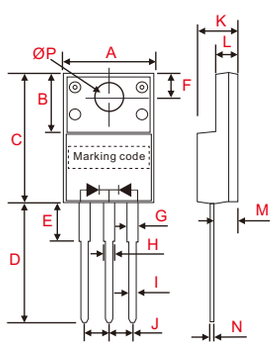
- Epoxy : UL94-V0 rated flame retardant.
- Case : JEDEC ITO-220AB molded plastic body.
- Terminals : Solder plated, solderable per MIL-STD-750, Method 2026.
- Polarity: As marked.
- Weight : Approximated 2.25 gram.

■ Outline

ITO-220AB



symbol	Dimensions in inches(millimeters)	
	Min	Max
A	0.390(9.9)	0.408(10.36)
B	0.268(6.8)	0.283(7.2)
C	0.583(14.8)	0.598(15.2)
D	0.512(13.0)	0.543(13.8)
E	0.102(2.6)	0.150(3.8)
F	0.101(2.55)	0.112(2.85)
G	0.043(1.1)	0.053(1.35)
H	0.043(1.1)	0.053(1.35)
I	0.020(0.5)	0.028(0.7)
J	0.098(2.49)	0.102(2.59)
K	0.169(4.3)	0.185(4.7)
L	0.112(2.85)	0.128(3.25)
M	0.098(2.5)	0.114(2.9)
N	0.020(0.5)	0.028(0.7)
ØP	0.130(3.3)	0.134(3.5)

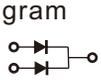


Alternate

symbol	Dimensions in inches(millimeters)	
	Min	Max
A	0.383(9.72)	0.404(10.27)
B	0.248(6.3)	0.272(6.9)
C	0.571(14.5)	0.610(15.5)
D	0.516(13.1)	0.547(13.9)
E	-	0.161(4.1)
F	0.094(2.4)	0.126(3.2)
G	0.039(1.0)	0.051(1.3)
H	0.039(1.0)	0.051(1.3)
I	0.020(0.5)	0.035(0.9)
J	0.095(2.41)	0.105(2.67)
K	0.169(4.3)	0.189(4.8)
L	0.055(1.4)	0.122(3.1)
M	0.091(2.3)	0.117(2.96)
N	0.014(0.35)	0.031(0.8)
ØP	0.122(3.1)	0.142(3.6)

Dimensions in inches and (millimeters)

■ Circuit Diagram



■ Maximum ratings and electrical characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Parameter	Conditions	Symbol	CF4060CT	UNIT
Working peak reverse voltage		V_{RWM}	60	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}	250	A
Peak repetitive reverse surge current (per diode)	2us	I_{RRM}	2	A
Thermal resistance (per diode)	Junction to case	$R_{\theta JC}$	4	°C/W
	Junction to ambient	$R_{\theta JA}$	35	
Storage temperature		T_{STG}	-55 ~ +150	°C
Junction temperature		T_J	-55 ~ +125	

Parameter	Conditions	Symbol	MIN.	TYP.	MAX.	UNIT
Forward voltage drop (per diode)	I_F = 3A, T_J = 25°C	V_F		335		mV
	I_F = 20A, T_J = 25°C			540	580	
	I_F = 20A, T_J = 125°C			390		
Reverse current (per diode)	V_R = V_{RRM} T_J = 25°C	I_R		0.09	0.25	mA
	V_R = V_{RRM} T_J = 125°C			75	150	
Reverse Breakdown voltage (per diode)	Ir = 0.5mA, T_J=25°C	V_{BR}	60			V

Document ID : DS-11KIZ
Revised Date : 2016/04/14
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■ Rating and characteristic curves

Fig. 1 - Instantaneous Forward Characteristics

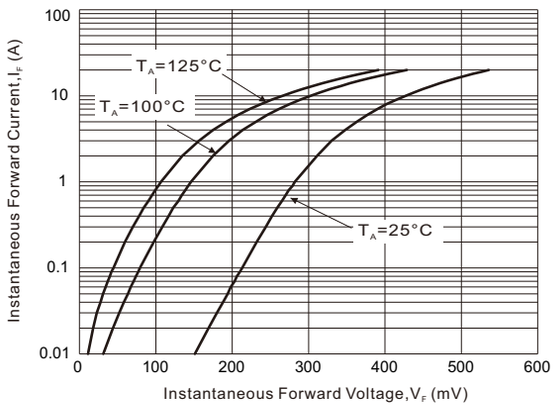


Fig. 2 - Reverse Characteristics

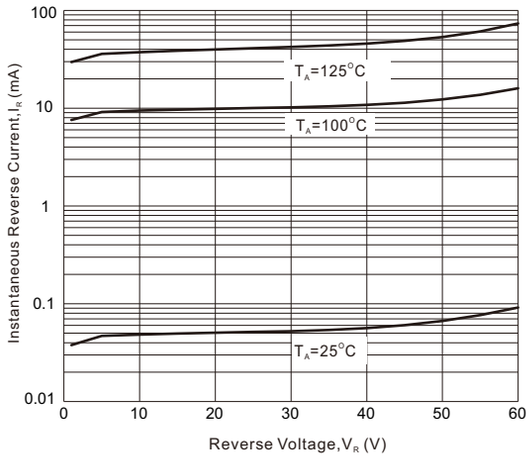


Fig. 3 - Forward Power Dissipation

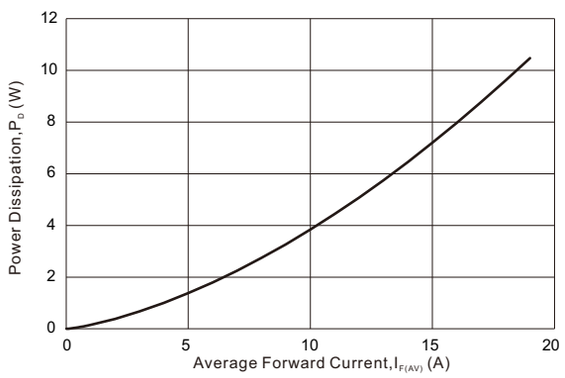


Fig.4 - Forward Current Derating Curve
(Per Diode)

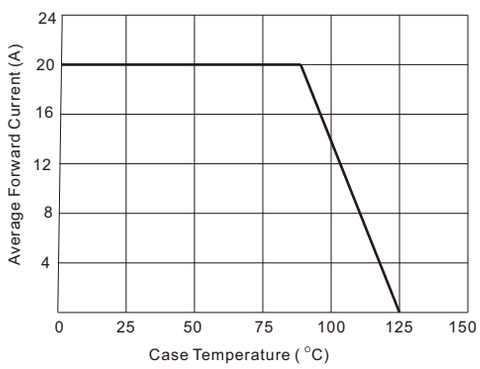
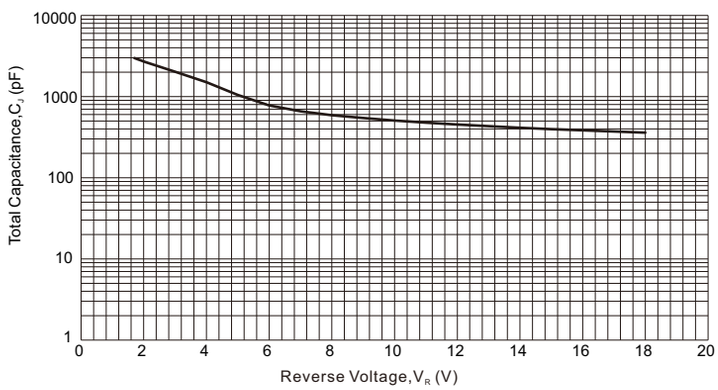


Fig. 5 - Total Capacitance VS. Reverse Voltage



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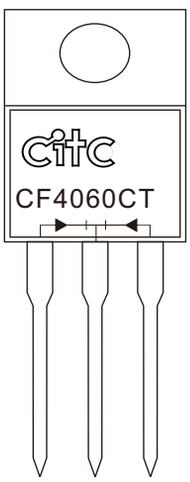
■ Marking information



CF4060CT : Product type marking code

: CITC Logo

■ Ordering/Packing infirmation

Part number		Case	Q'TY/Tube (PCS)	Q'TY/Box (PCS)	Q'TY/Carton (PCS)
Pb Pb-Free	CF4060CT	ITO-220AB	50	1000	5000
HF Halogen Free	CF4060CTG				

Notes : 1. For packaging details please reference our website at http://www.citcorp.com.tw/tchinese/products/index.php

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