

Main Product Characteristics

$I_{F(AV)}$	2 X 10A
V_{RRM}	60V
T_J	150°C
$V_{F(Typ)}$	0.55V

Features

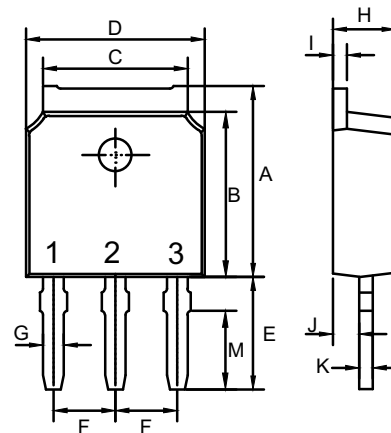
- Low forward voltage drop.
- Excellent high temperature stability.
- Fast switching capability.
- Lead-free parts meet environmental standards of MIL-STD-19500 /228

Mechanical Data

- Epoxy : UL94-V0 rated flame retardant.
- Case : JEDEC TO-251 Molded plastic body
- Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: As marked.
- Weight : Approximated 0.335 gram

Outline

TO-251



TO-251(IPAK)		
Unit:mm		
DIM	MIN	MAX
A	6.85	7.25
B	5.90	6.30
C	5.13	5.53
D	6.40	6.80
E	3.95	4.35
F	2.19	2.39
G	0.45	0.85
H	2.20	2.40
I	0.41	0.61
J	0.71	1.31
K	0.41	0.61
M	2.96	3.16

Dimensions in inches and (millimeters)

Maximum Ratings

Rating at 25°C ambient temperature unless otherwise specified.

Circuit Diagram



Parameter	Condition	Symbol	CU20L60CT	UNIT
Maximum DC Blocking Voltage		V_{DC}	60	V
Forward Rectified Current (total device)		I_O	20	A
Forward Surge Current (per diode)	8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I_{FSM}	140	A
Peak Repetitive Reverse Surge Current (per diode)	Pulse width 2us, 1000Hz, square wave at T_A 25°C, 10 cycles	I_{RRM}	2	A
Thermal Resistance (per diode)	Junction to case	R_{BJC}	3	°C/W
	Junction to ambient	R_{BJA}	65	
Storage Temperature		T_{STG}	-55 ~ +150	°C
Operating Junction Temperature		T_J	-55 ~ +150	°C

Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Parameter	Condition	Symbol	MIN.	TYP.	MAX.	UNIT
Forward Voltage Drop (per diode)	$I_F = 3A, T_J = 25^\circ C$	V_F		440		mV
	$I_F = 10A, T_J = 25^\circ C$			580	640	
	$I_F = 10A, T_J = 125^\circ C$			550		
Reverse Current (per diode)	$V_R = V_{RRM}, T_J = 25^\circ C$	I_R		0.004	0.05	mA
	$V_R = V_{RRM}, T_J = 125^\circ C$			4	20	
Reverse Breakdown Voltage (per diode)	$I_R = 0.1mA, T_J = 25^\circ C$	V_{BR}	60			V

■ Rating and Characteristic Curves

Fig. 1 - Forward Characteristics

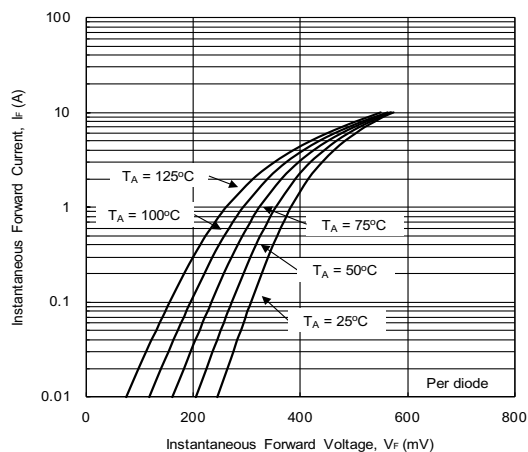


Fig. 2 - Reverse Characteristics

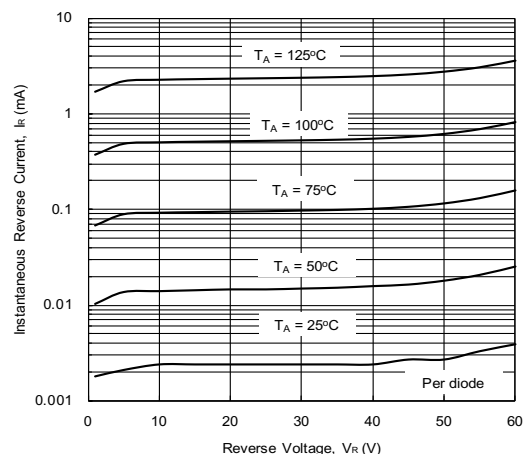


Fig. 3 - Forward Power Dissipation

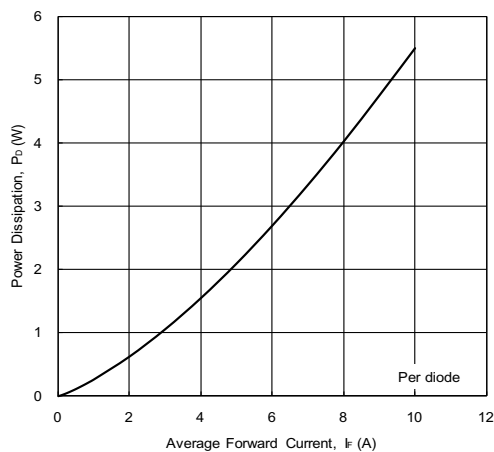


Fig. 4 - Forward Current Derating Curve

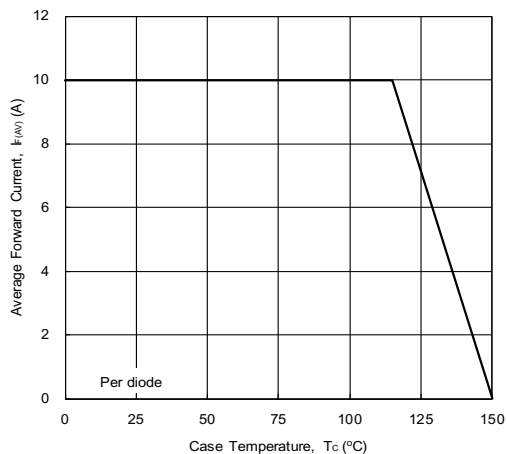
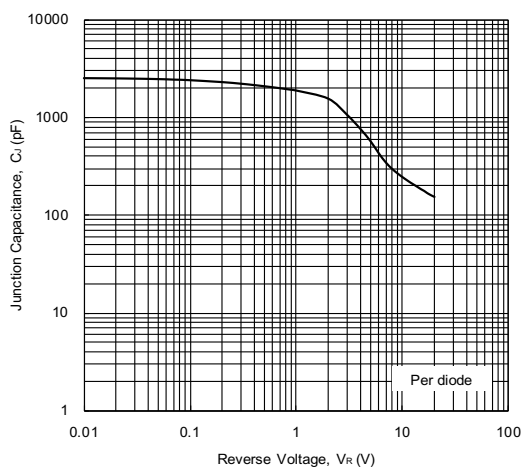
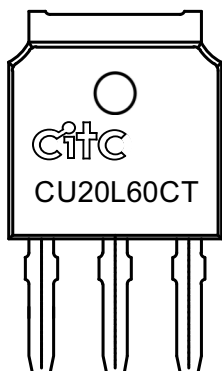


Fig. 5 - Junction Capacitance



■ Marking Information



CU20L60CT : Product type marking code

 : CITC Logo

■ Ordering / Packing Information

Part number		Case	Q'TY/Tube (PCS)	Q'TY/Box (PCS)	Q'TY/Carton (PCS)
	CU20L60CT	TO-251	75	4500	22,500
	CU20L60CTG				

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

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