

### FEATURES

- ◇ High current capability, low forward voltage
- ◇ Excellent high temperature stability
- ◇ Low power loss, and high efficiency
- ◇ High forward surge capability
- ◇ For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications.
- ◇ RoHS compliant

### MACHANICAL DATA

- ◇ Case: TO-220/TO-220F molded plastic package
- ◇ Terminal: Matte tin plated, solderable per MIL-STD-750, Method 2026
- ◇ Molding Compound Flammability Rating: UL94-0
- ◇ High temperature soldering guaranteed: 260°C/10second
- ◇ Polarity: As marked
- ◇ Mounting position: Any

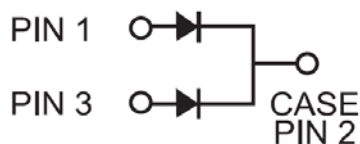
### ORDERING INFORMATION

- ◇ Device:  
GT20100CT  
GT20100FCT
- ◇ Package: TO-220/TO-220F
- ◇ Marking: As marked
- ◇ Material: RoHS compliant
- ◇ Packing: Plastic tube
- ◇ Quantity per tube: 50pcs

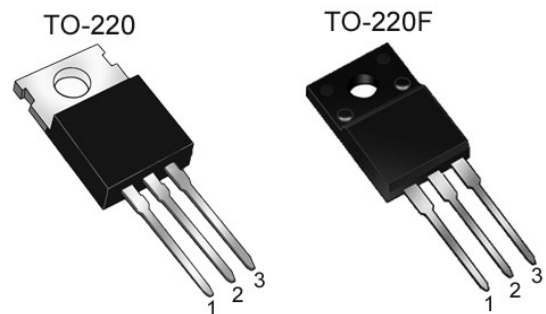
### APPLICATIONS

- ◇ Switching mode power supply applications
- ◇ Portable equipment battery applications
- ◇ High frequency rectification
- ◇ DC/DC converter

### PIN CONFIGURATION



### PACKAGE OUTLINE



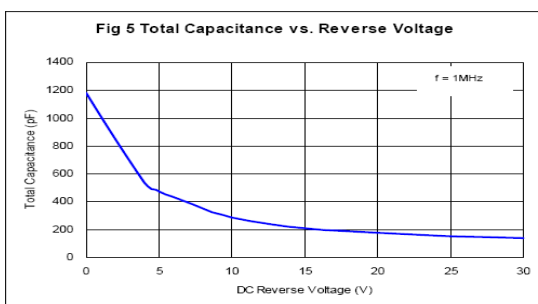
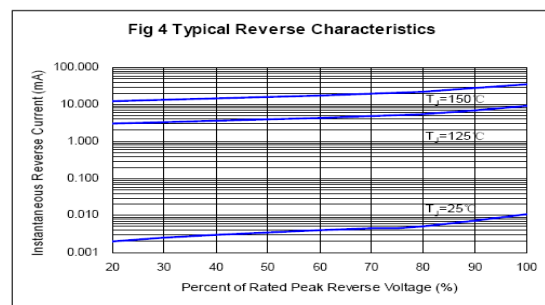
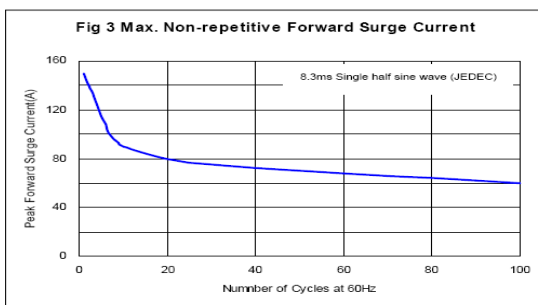
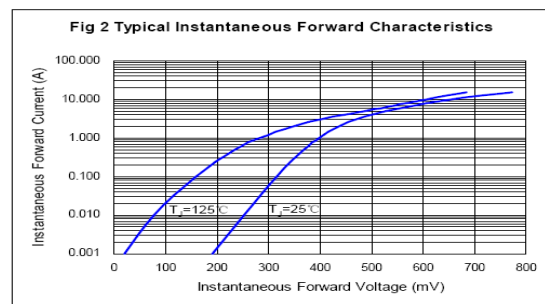
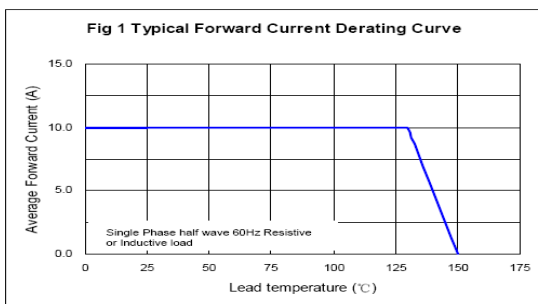
### ABSOLUTE MAXIMUM RATING (Tamb=25°C, unless otherwise specified)

Symbol	Parameter	Value	Units
$V_{RRM}$	Repetitive Peak Reverse Voltage	100	V
$I_{F(AV)}$	Average Forward Current	Total device	20
		Per Leg	10
$I_{FSM}$	Peak Forward Surge Current, 8.3ms single half sine-wave Per Leg	150	A
$T_J$ & $T_{STG}$	Junction and Storage Temperature	-50~+150	°C

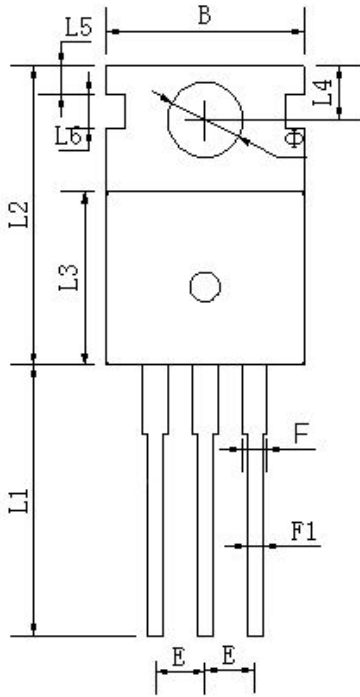
### ELECTRICAL CHARACTERISTICS (Tamb=25°C, unless otherwise specified)

Symbol	Parameter	Test Condition	Min	Typ	Max	Units
V <sub>F</sub>	Forward Voltage	I <sub>F</sub> = 5A Ta=25°C		0.54		V
		I <sub>F</sub> = 10A Ta=25°C		0.65	0.72	V
		I <sub>F</sub> = 5A Ta=125°C		0.50		V
		I <sub>F</sub> = 10A Ta=125°C		0.58	0.65	V
V <sub>R</sub>	Reverse Breakdown Voltage	I <sub>R</sub> = 0.5mA	100			V
I <sub>R</sub>	Reverse Leakage Current	V <sub>R</sub> = 100V Ta=25°C			100	μA
		V <sub>R</sub> = 100V Ta=125°C			25	mA
C <sub>J</sub>	Junction Capacitance per Leg	f=1MHz, V <sub>R</sub> =4V		540		pF

### ELECTRICAL CHARACTERISTICS CURVE



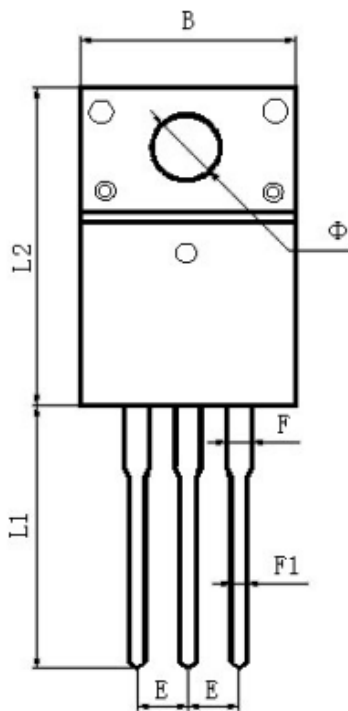
## TO-220 PACKAGE OUTLINE DIMENSIONS



DIM	MIN	NOM	MAX
A	4.25	4.45	4.65
A1	2.47	2.67	2.87
B	9.86	10.16	10.46
C	1.22	1.27	1.37
C1	0.33	0.38	0.48
E	2.44	2.54	2.64
F	1.07	1.27	1.47
F1	0.7	0.8	0.9
L1	12.5	13.5	14.5
L2	14.94	15.24	15.54
L3	8.55	8.85	9.15
L4	2.54	2.74	2.94
L5	1.07	1.27	1.47
L6	1.45	1.65	1.85
Φ	3.64	3.84	4.04

Unit: mm

## TO-220F PACKAGE OUTLINE DIMENSIONS



DIM	MIN	NOM	MAX
A	4.50	4.70	4.90
A1	2.56	2.76	2.96
B	9.86	10.16	10.46
C	2.34	2.54	2.74
C1	0.45	0.50	0.60
E	2.34	2.54	2.74
F	1.08	1.28	1.48
F1	0.7	0.8	0.9
L1	11.98	12.98	13.98
L2	15.57	15.87	16.17
L3	6.48	6.68	6.88
Φ	2.98	3.18	3.38

Unit: mm