

**Ultrafast Rectifier**
**D20LC40**
**FEATURES**

- Low noise
- trr50ns
- Fully Isolated Molding
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**MECHANICAL CHARACTERISTICS**

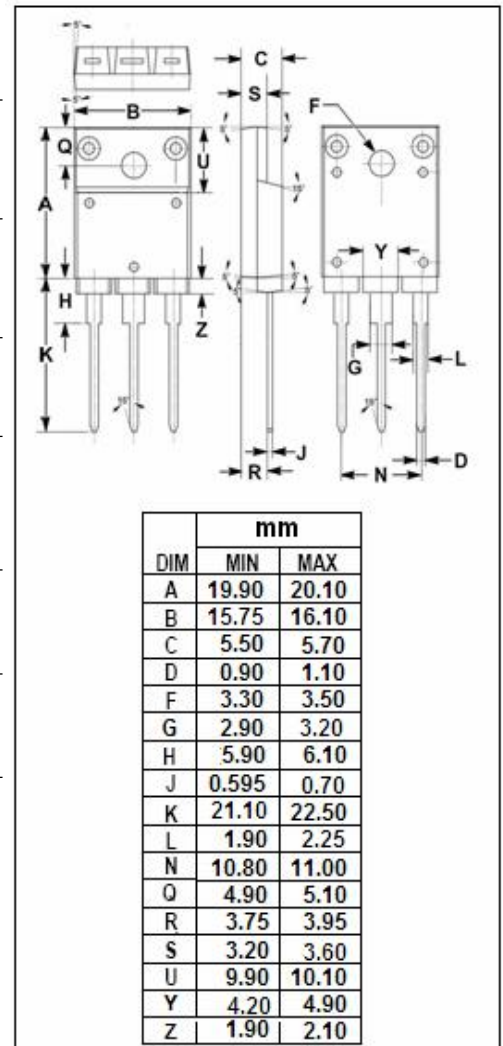
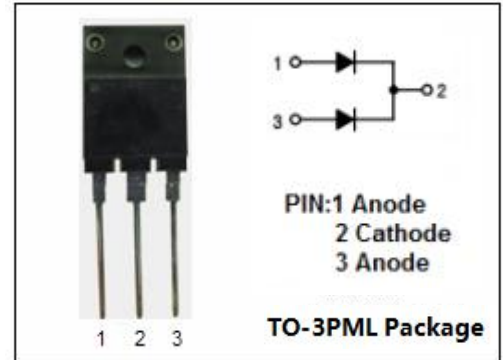
- Switching power supply
- Home Appliances, Office Equipment, Factory Automation

**ABSOLUTE MAXIMUM RATINGS(Ta=25°C)**

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	400	V
I <sub>F(AV)</sub>	Average Rectified Forward Current (Rated V <sub>R</sub> ) T <sub>C</sub> = 102°C	20	A
I <sub>FSM</sub>	Nonrepetitive Peak Surge Current (Surge applied at rated load conditions half-wave, single phase, 60Hz)	120	A
T <sub>J</sub>	Junction Temperature	150	°C
T <sub>stg</sub>	Storage Temperature Range	-40~150	°C

**THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
R <sub>thj-c</sub>	Thermal Resistance, Junction to Case	1.7	°C/W



## Ultrafast Rectifier

## D20LC40

**ELECTRICAL CHARACTERISTICS** (Pulse Test: Pulse Width=300  $\mu$  s, Duty Cycle  $\leq$  2%)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V <sub>F</sub>	Maximum Instantaneous Forward Voltage	I <sub>F</sub> = 10A ; T <sub>C</sub> = 25°C	1.3	V
I <sub>R</sub>	Maximum Instantaneous Reverse Current	Rated DC Voltage, T <sub>C</sub> = 25°C	10	$\mu$ A
t <sub>rr</sub>	Maximum Reverse Recovery Time	I <sub>F</sub> = 0.5A; I <sub>R</sub> = 1A	50	ns

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