

**Ultrafast Recovery Rectifier**
**VS-ETL1506-M3**
**FEATURES**

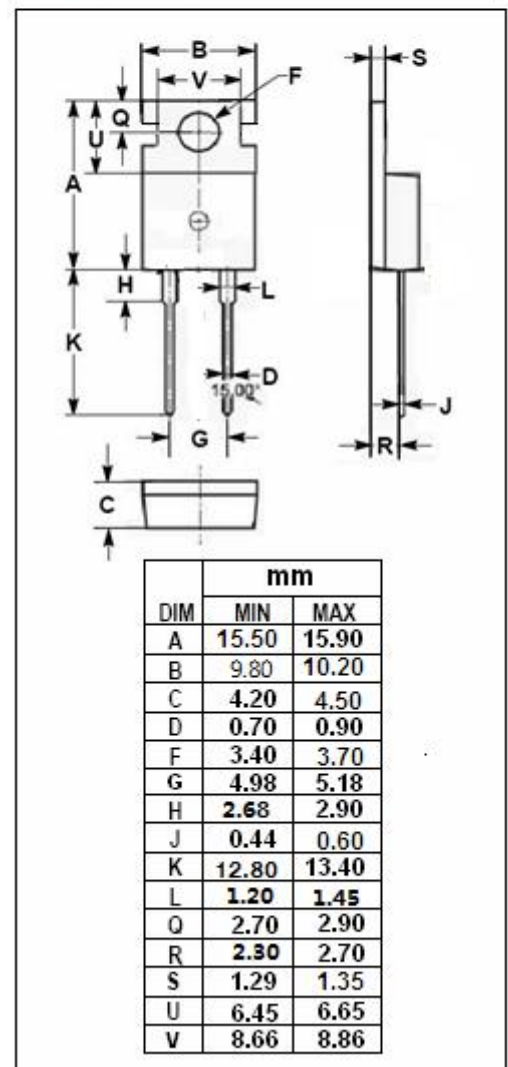
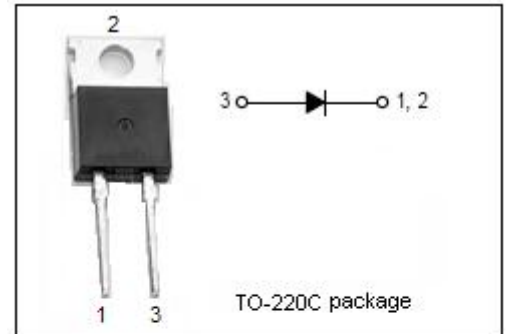
- Ultrafast recovery time
- Low forward voltage
- Low loss and soft recovery
- Single diode
- High temperature glass passivated junction
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**APPLICATIONS**

- AC/DC power supplies
- Laptop and printer AC adaptors
- Desktop PC, TV and monitor

**ABSOLUTE MAXIMUM RATINGS (T<sub>a</sub>=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	600	V
I <sub>F(AV)</sub>	Average Rectified Forward Current @T <sub>c</sub> =157°C	15	A
I <sub>FSM</sub>	Nonrepetitive Peak Surge Current (Surge applied at rated load conditions half-wave, single phase, 50Hz)	200	A
P <sub>D</sub>	Total Power Dissipation	0.5	W
T <sub>J</sub>	Junction Temperature	-65~175	°C
T <sub>stg</sub>	Storage Temperature Range	-65~175	°C



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**THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	2.3	$^{\circ}C/W$

**ELECTRICAL CHARACTERISTICS( $T_a=25^{\circ}C$ )** (Pulse Test: Pulse Width=300  $\mu$  s, Duty Cycle $\leq$ 2%)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
$V_F$	Maximum Instantaneous Forward Voltage	$I_F=15A$	1.07	V
		$I_F=15A; T_C=150^{\circ}C$	0.91	
$I_R$	Maximum Instantaneous Reverse Current	$V_{RRM}=600V$	15	$\mu A$
		$V_{RRM}=600V; T_C=150^{\circ}C$	100	$\mu A$
$t_{rr}$	Maximum Reverse Recovery Time	$I_F=1A; V_R=30V; di_F/dt=100A/\mu s$	110	ns

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