

Ultrafast Rectifier

30CPH03

FEATURES

- Short reverse recovery time
- Low forward voltage drop

APPLICATIONS

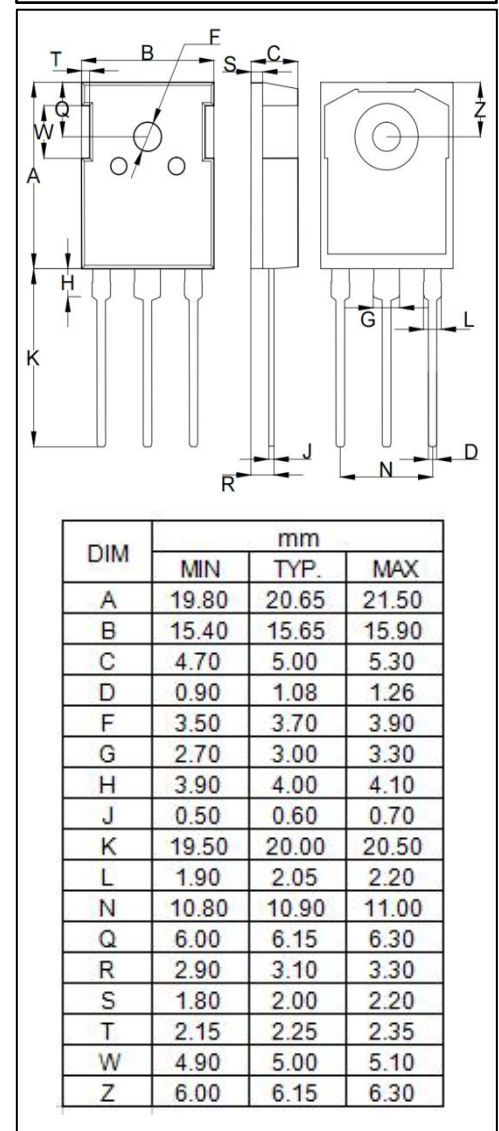
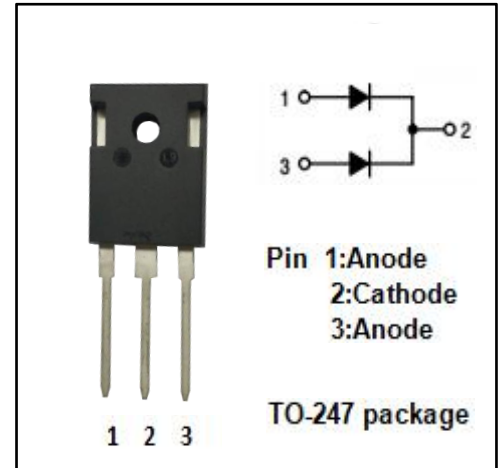
- Inverters、Choppers and Converters
- Output Rectifiers

ABSOLUTE MAXIMUM RATINGS($T_a=25^{\circ}\text{C}$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{RRM} V_{RWM} V_R	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	300	V
$I_{F(AV)}$	Average Rectified Forward Current	30	A
I_{FSM}	Non-repetitive Peak Surge Current 10 ms sine pulse, rated V_{RRM} applied	140	A
T_J	Junction Temperature	-65~175	$^{\circ}\text{C}$
T_{stg}	Storage Temperature Range	-65~175	$^{\circ}\text{C}$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	2.0	$^{\circ}\text{C}/\text{W}$



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ELECTRICAL CHARACTERISTICS($T_J = 25^\circ\text{C}$ unless otherwise specified)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V_F	Maximum Instantaneous Forward Voltage	$I_F = 30\text{A}$, $T_J = 25^\circ\text{C}$	1.25	V
I_R	Maximum Instantaneous Reverse Current	$V_R = V_{RWM}$	40	uA
		$V_R = V_{RWM}$, $T_J = 125^\circ\text{C}$	400	

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