

Schottky Rectifier

30CPQ100

FEATURES

- Low forward voltage drop
- High frequency operation

APPLICATIONS

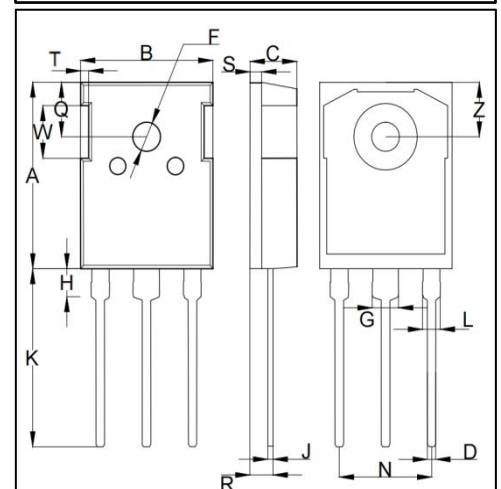
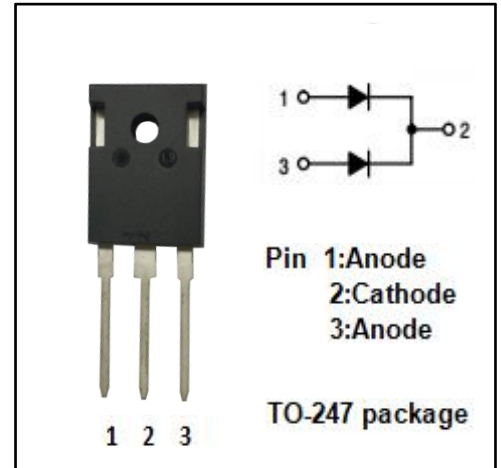
- Switching power supplies
- Converters
- Freewheeling diodes
- Reverse battery protection

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{RRM}	Peak Repetitive Reverse Voltage	100	V
$I_{F(AV)}$	Average Rectified Forward Current	2*15	A
I_{FSM}	Non-repetitive Peak Surge Current $t_p = 5 \mu\text{s}$ sine	920	A
T_J	Junction Temperature	-55~175	$^{\circ}\text{C}$
T_{stg}	Storage Temperature Range	-55~175	$^{\circ}\text{C}$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th j-c}$	Thermal Resistance, Junction to Case	1.1	$^{\circ}\text{C/W}$



DIM	mm		
	MIN	TYP.	MAX
A	19.80	20.65	21.50
B	15.40	15.65	15.90
C	4.70	5.00	5.30
D	0.90	1.08	1.26
F	3.50	3.70	3.90
G	2.70	3.00	3.30
H	3.90	4.00	4.10
J	0.50	0.60	0.70
K	19.50	20.00	20.50
L	1.90	2.05	2.20
N	10.80	10.90	11.00
Q	6.00	6.15	6.30
R	2.90	3.10	3.30
S	1.80	2.00	2.20
T	2.15	2.25	2.35
W	4.90	5.00	5.10
Z	6.00	6.15	6.30

Schottky Rectifier**30CPQ100****ELECTRICAL CHARACTERISTICS**

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V_F	Maximum Forward Voltage Drop per Leg	$I_F = 15A ; T_J = 25^{\circ}C$	0.86	V
		$I_F = 30A ; T_J = 25^{\circ}C$	1.05	
		$I_F = 15A ; T_J = 125^{\circ}C$	0.67	
		$I_F = 30A ; T_J = 125^{\circ}C$	0.81	
I_R	Maximum Instantaneous Reverse Current per Leg	Rated DC Voltage, $T_J = 25^{\circ}C$	0.55	mA
		Rated DC Voltage, $T_J = 125^{\circ}C$	7	

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