

Schottky Barrier Rectifier

30CTQ100S

FEATURES

- Low forward voltage drop
- Low Power Loss,high Efficiency
- Guard ring for overvoltage protection
- High Surge Capability,High Current Capability
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

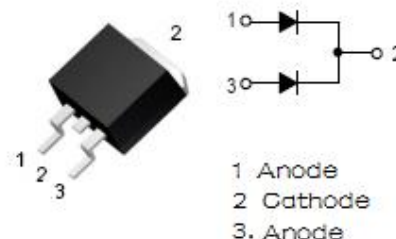
APPLICATIONS

- For use inswitching power supplies, converters, free-wheeling diodes, and reverse battery protection.

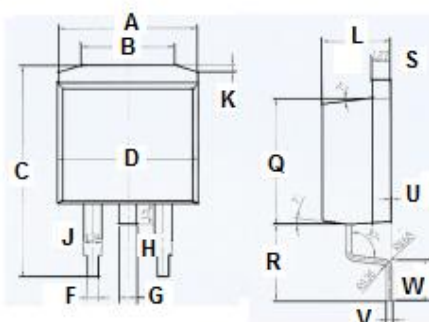
ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{RRM} V _{RWM} V _R	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	100	V
I _{F(AV)}	Average Rectified Forward Current	30	A
I _{FSM}	Nonrepetitive Peak Surge Current	275	A
T _J	Junction Temperature	-55~175	°C
T _{stg}	Storage Temperature Range	-55~175	°C
dv/dt	Voltage Rate of Change (Rated V _R)	10000	V/ μ s

D2PAK



TO-263 Package



DIM	mm	
	MIN	MAX
A		10
B	6.6	6.8
C	15.23	15.25
D	10.15	10.17
F	0.76	0.78
G	1.26	1.28
H	1.4	1.6
J	1.33	1.35
K	0.4	0.6
L	4.6	4.8
Q	8.69	8.71
R	5.28	5.30
S	1.26	1.28
U	0.0	0.2
V	0.37	0.39
W	2.80	2.82

Schottky Barrier Rectifier**30CTQ100S****THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	1.63	°C/W

ELECTRICAL CHARACTERISTICS (Pulse Test: Pulse Width=300 μ s, Duty Cycle \leq 1%)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V_F	Maximum Instantaneous Forward Voltage	$I_F = 15A ; T_c = 25^\circ C$	0.86	V
		$I_F = 15A ; T_c = 125^\circ C$	0.67	
I_R	Maximum Instantaneous Reverse Current	$V_R = V_{RRM}, T_c = 25^\circ C$	0.55	mA
		$V_R = V_{RRM}, T_c = 125^\circ C$	7	

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