

Ultrafast Rectifier
DF20LC30
FEATURES

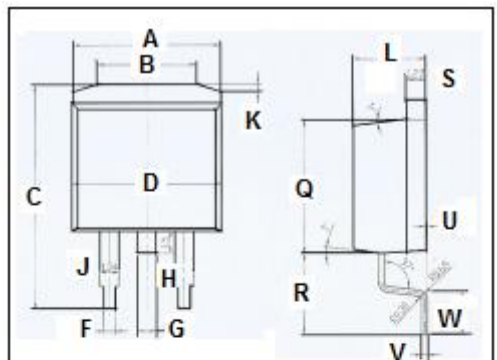
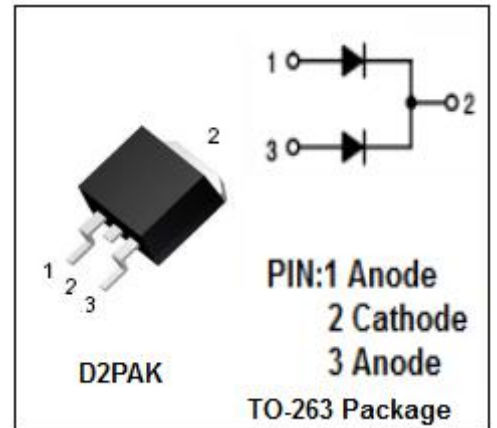
- Guarding for over voltage protection
- Dual rectifier construction, positive center tap
- Metal of silicon rectifier, majority carrier conduction
- Low forward voltage, high efficiency
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Switching power supply
- DC/DC converter

ABSOLUTE MAXIMUM RATINGS (T_a=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _R RM V _R WM V _R	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	300	V
I _F (AV)	Average Rectified Forward Current Per Leg Total device	10 20	A
I _{FSM}	Nonrepetitive Peak Surge Current (Surge applied at rated load conditions half-wave, single phase, 60Hz)	180	A
P _D	Maximum power dissipation	125	W
T _J	Junction Temperature	-55~150	°C
T _{stg}	Storage Temperature Range	-55~150	°C



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

Fast Recovery Rectifier**DF20LC30****THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
R _{thj-c}	Thermal Resistance, Junction to Case	1.0	°C/W

ELECTRICAL CHARACTERISTICS (T_a=25°C) (Pulse Test: Pulse Width=300 μs, Duty Cycle≤2%)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V _F	Maximum Instantaneous Forward Voltage	I _F = 10A ; T _J =25 °C	1.3	V
I _R	Maximum Instantaneous Reverse Current	V _R = 300V	25	μ A
t _{rr}	Maximum Reverse Recovery Time	I _F =0.5A; I _R =25uA	30	ns

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