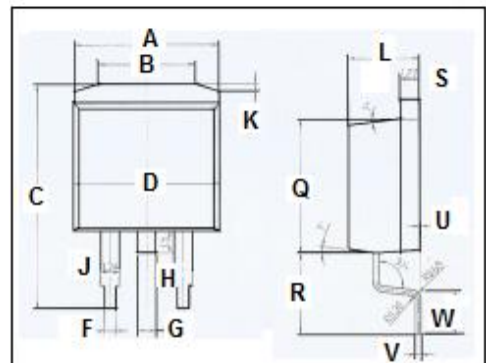
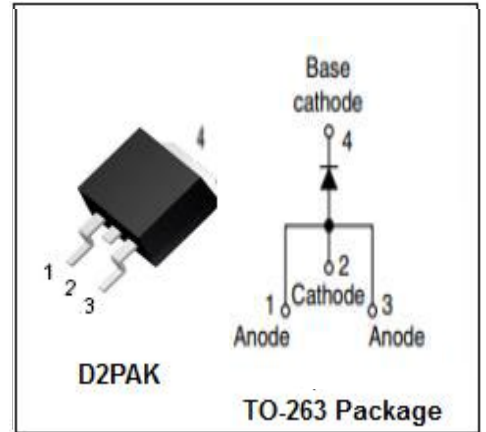


**Ultra fast Rectifier**
**DSEP15-06AS**
**FEATURES**

- With TO-263 packaging
- Metal silicon junction, majority carrier conduction
- Low power loss, high efficiency
- Guardring for overvoltage protection
- High surge capability
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**APPLICATIONS**

- Switching power supply
- High frequency inverters
- Reverse battery protection
- Polarity protection applications



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

**ABSOLUTE MAXIMUM RATINGS (T<sub>a</sub>=25°C)**

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>RRM</sub> V <sub>RMS</sub> V <sub>R</sub>	Peak Repetitive Reverse Voltage RMS Voltage DC Blocking Voltage	600	V
I <sub>F(AV)</sub>	Average Rectified Forward Current @T <sub>c</sub> =140°C	15	A
I <sub>FSM</sub>	Nonrepetitive Peak Surge Current 10 ms single half sine-wave superimposed on rated load conditions; One shot	110	A
P <sub>D</sub>	Maximum Power Dissipation	95	W
T <sub>j</sub>	Junction Temperature	-40~175	°C
T <sub>stg</sub>	Storage Temperature Range	-55~175	°C

**Ultra fast Rectifier**
**DSEP15-06AS**
**THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
R <sub>th j-c</sub>	Thermal Resistance, Junction to Case	1.6	°C/W

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

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V <sub>F</sub>	Maximum Instantaneous Forward Voltage	I <sub>F</sub> = 15A; T <sub>c</sub> = 25°C I <sub>F</sub> = 15A; T <sub>c</sub> = 150°C I <sub>F</sub> = 30A; T <sub>c</sub> = 25°C I <sub>F</sub> = 30A; T <sub>c</sub> = 150°C	2.04 1.35 2.25 1.59	V
I <sub>R</sub>	Maximum Instantaneous Reverse Current	V <sub>R</sub> = rated V <sub>RRM</sub> ; T <sub>c</sub> = 25°C T <sub>c</sub> =150°C	100 500	μ A
t <sub>rr</sub>	Maximum Reverse Recovery Time	I <sub>F</sub> =15A; dI <sub>F</sub> /dt=200A/ μ s; V <sub>R</sub> =300V	35	ns

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