



**Description**

**Features**

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**Applications**

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**MOSFET MAXIMUM RATINGS** ( $T_C = 25^\circ\text{C}$  unless otherwise noted)

Symbol	Parameter	Ratings	Unit
$V_{RRM}$	Peak Repetitive Reverse Voltage	650	V
$E_{AS}$	Single Pulse Avalanche Energy (Note 1)	49	mJ
$I_F$	Continuous Rectified Forward Current	@ $T_C < 25^\circ\text{C}$	23.6
		@ $T_C < 140^\circ\text{C}$	10
$I_{F, Max}$	Non-Repetitive Peak Forward Surge Current	$T_C = 25^\circ\text{C}$ , 10 $\mu\text{s}$	600
		$T_C = 150^\circ\text{C}$ , 10 $\mu\text{s}$	554
$I_{F, SM}$	Non-Repetitive Forward Surge Current, $T_C = 25^\circ\text{C}$	Half-Sine Pulse, $t_p = 8.3 \text{ ms}$	45
$P_{tot}$	Power Dissipation	$T_C = 25^\circ\text{C}$	75
		$T_C = 150^\circ\text{C}$	12.5
$T_J, T_{STG}$	Operating and Storage Temperature Range	-55 to +175	$^\circ\text{C}$

Stresses exceeding those listed in the Maximum Ratings table may damage the device. If any of these limits are exceeded, device functionality should not be assumed, damage may occur and reliability may be affected.

1.  $E_{AS}$  of 49 mJ is based on starting  $T_J = 25^\circ\text{C}$ ,  $L = 0.5 \text{ mH}$ ,  $I_{AS} = 14 \text{ A}$ ,  $V = 50 \text{ V}$ .









SCALE 1:1

**D<sup>2</sup>PAK-3 (TO-263, 3-LEAD)**  
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