

**Ultrafast Recovery Rectifier**
**DE3L40**
**FEATURES**

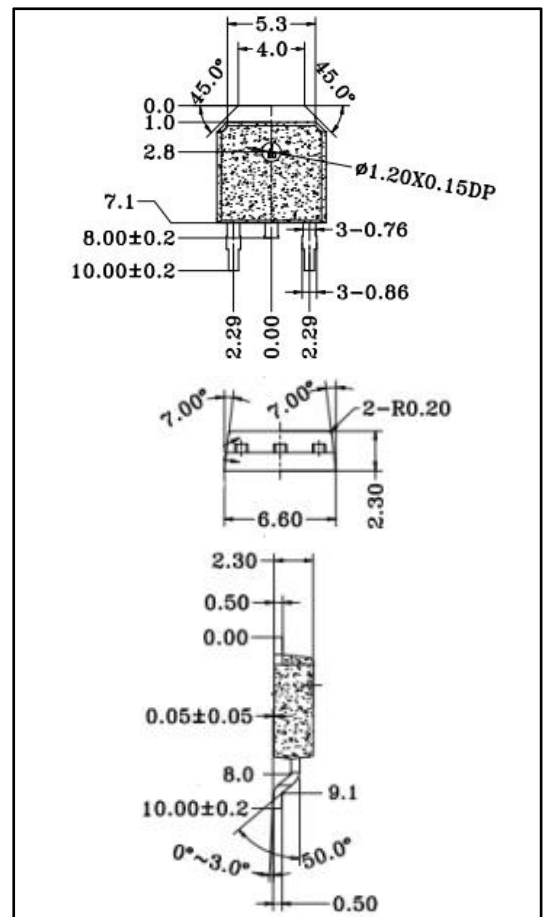
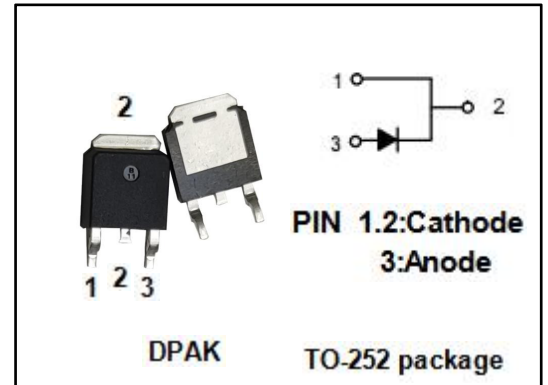
- Ultrafast Recovery Time
- Low Forward Voltage
- Low Leakage Current
- 150°C Operating Junction Temperature
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**APPLICATIONS**

- Switching power supplies
- Power switching circuits
- DC/DC converter

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

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	400	V
I <sub>F(AV)</sub>	Average Rectified Forward Current (Rated V <sub>R</sub> )	3	A
I <sub>FSM</sub>	Peak Surge Forward Current	50	A
T <sub>J</sub>	Junction Temperature	-65~150	°C
T <sub>stg</sub>	Storage Temperature Range	-65~150	°C



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**THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	12	°C/W

**ELECTRICAL CHARACTERISTICS**

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
$V_F^*$	Maximum Instantaneous Forward Voltage	$I_F = 3A, T_c = 25^\circ C$	1.3	V
$I_R$	Maximum Instantaneous Reverse Current	$V_{RRM} = 400V, T_c = 25^\circ C$	10	uA
$t_{rr}$	Maximum Reverse Recovery Time	$I_F = 0.5A, I_R = 1A$	50	nS

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