

# isc N-Channel MOSFET Transistor

## **IRFS7534TRLPBF**

#### **DESCRIPTION**

- Drain Current –I<sub>D</sub>=232 A@ T<sub>C</sub>=25 °C
- · Drain Source Voltage-
  - : V<sub>DSS</sub>= 60V(Min)
- · 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

#### **APPLICATIONS**

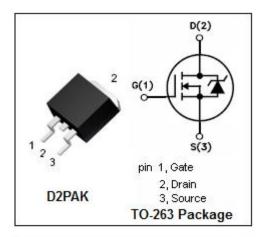
- Improved Gate, Avalanche and Dynamic dV/dt Ruggedness
- · Fully Characterized Capacitance and Avalanche SOA
- · Enhanced body diode dV/dt and dl/dt Capability
- · Lead-Free, RoHS Compliant

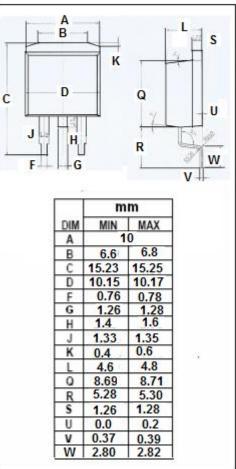


SYMBOL	ARAMETER	VALUE	UNIT
V <sub>DSS</sub>	Drain-Source Voltage (V <sub>GS</sub> =0)	60	V
V <sub>GS</sub>	Gate-Source Voltage ±20		V
I <sub>D</sub>	Drain Current-continuous@ TC=25℃ 232		Α
P <sub>tot</sub>	Total Dissipation@TC=25°C 294		W
T <sub>j</sub>	Max. Operating Junction Temperature -55~175		$^{\circ}$
T <sub>stg</sub>	Storage Temperature Range	-55~175	

#### THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R <sub>th j-c</sub>	Thermal Resistance,Junction to Case	0.51	°C/W







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### **IRFS7534TRLPBF**

### • ELECTRICAL CHARACTERISTICS (T<sub>C</sub>=25°C)

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>(BR)DSS</sub>	Drain-Source Breakdown Voltage	V <sub>GS</sub> = 0; I <sub>D</sub> = 0.25mA	60			V
V <sub>GS(th)</sub>	Gate Threshold Voltage	V <sub>DS</sub> = V <sub>GS</sub> ; I <sub>D</sub> =0.25mA	2.1		3.7	V
R <sub>DS(on)</sub>	Drain-Source On-stage Resistance	V <sub>GS</sub> =10V; I <sub>D</sub> = 100A		2.0	2.4	mΩ
I <sub>GSS</sub>	Gate Source Leakage Current	V <sub>GS</sub> = ±20V;V <sub>DS</sub> = 0			±100	nA
I <sub>DSS</sub>	Zero Gate Voltage Drain Current	V <sub>DS</sub> =60V; V <sub>GS</sub> = 0			1	uA
V <sub>SD</sub>	Forward On-Voltage	I <sub>S</sub> = 100A; V <sub>GS</sub> =0			1.2	V

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