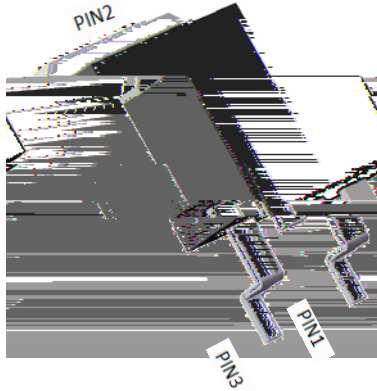


## Ultra-Fast Recovery Diodes 5A FRED



### Features

- Adopt FRED chip
  - Low forward Voltage drop
  - Fast reverse recovery time
- Typical applications: freewheeling diodes, and reverse battery protection.

### Mechanical Data

**Package:** TO-263

Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant

**Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102

**Polarity:** As marked

### Maximum Ratings (T<sub>j</sub>=25 °C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	MURB520
Device marking code			MURB520
Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	V	200
Average Rectified Output Current @60Hz sine wave, R-load, T <sub>c</sub> (FIG.1)	I <sub>O</sub>	A	5
Surge(Non-repetitive)Forward Current @60Hz half sine-wave, 1 cycle, T <sub>j</sub> =25	I <sub>FSM</sub>	A	50
Current Squared Time @1ms t 8.3ms T <sub>j</sub> =25	I <sup>2</sup> t	A <sup>2</sup> s	10
Storage Temperature	T <sub>stg</sub>		-55 ~ +175
Junction Temperature	T <sub>j</sub>		-55 ~ +175
Typical Junction capacitance @4V,1MHz	C <sub>j</sub>	pF	50



# MURB520

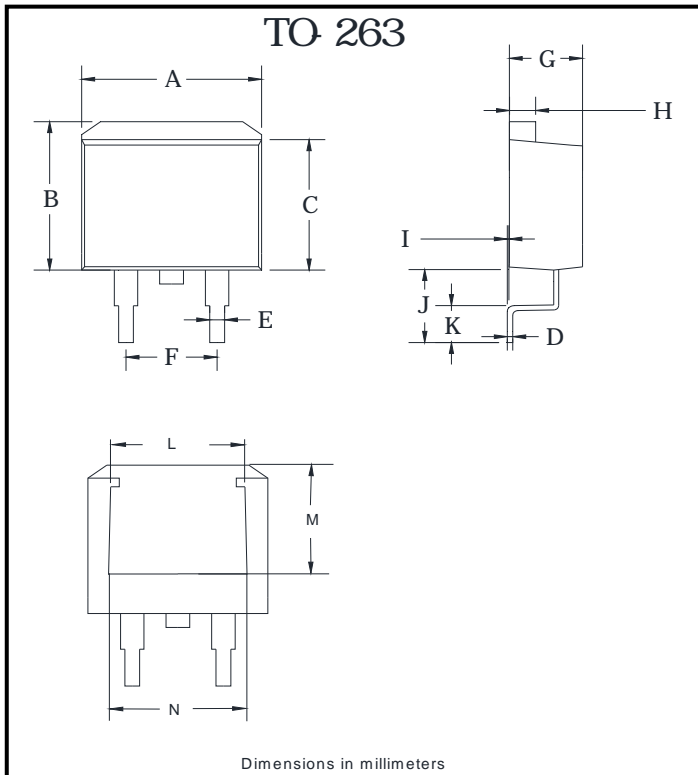
## Electrical Characteristics

	SYMBOL	UNIT	TEST CONDITIONS	Min	Typ	Max
Instantaneous forward voltage drop per diode	$V_{FM}$	V	$I_{FM}=5.0A @ T_j=25$	-	0.90	1.0
			$I_{FM}=5.0A @ T_j=150$		0.78	0.9
DC reverse current at rated DC blocking voltage per diode	$I_{RRM1}$	uA	$V_{RM} \# V_{RRM}$ $T_j=25$	-	-	5.0



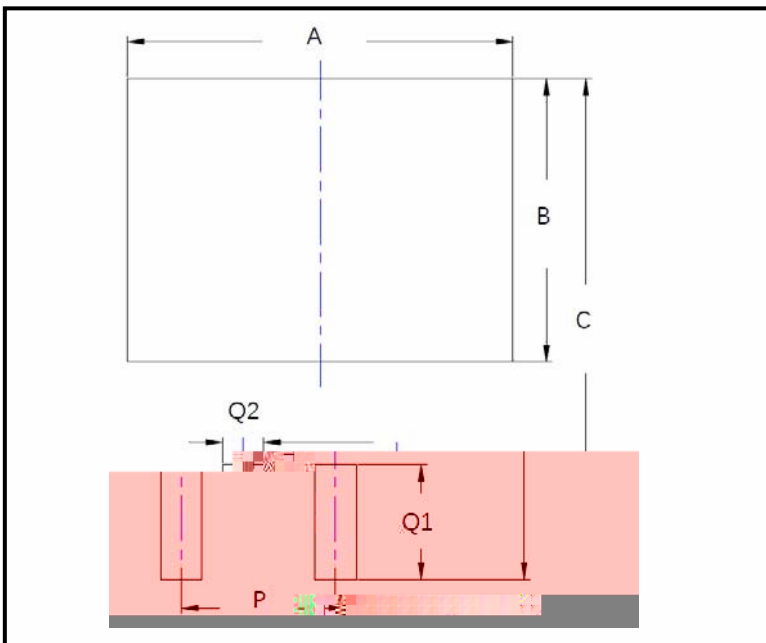


Outline Dimensions



TO-263		
Dim	Min	Max
A	9.5	11.5
B	9.7	10.5
C	8.4	9.0
D	0.28	0.64
E	0.68	0.94
F	4.55	5.6
G	4.04	5.10
H	1.14	1.4
I	0	0.2
J	4.9	6.05
K	1.79	2.79
L	7.3	7.9
M	6.2	6.8
N	7.6	8.2

Suggested Pad Layout



Dim	Millimeters
A	12.7
B	9.4
C	16.6
P	5.08
Q1	3.8
Q2	1.35



# MURB520

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## Disclaimer

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The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of which would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), Yangjie or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use &