# New Jersey Semi-Conductor Products, Inc.

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MUR2505 MUR2510 MUR2515 MUR2520



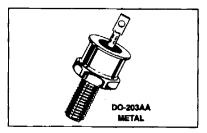
#### **SWITCHMODE POWER RECTIFIERS**

designed for use in switching power supplies, inverters and as free wheeling diodes, these state-of-the-art devices have the following features

- Ultrafast 50 Nanosecond Recovery Time
- Low Forward Voltage Drop
- Hermetically Sealed Metal DO-203AA (DO-4) Package

#### ULTRAFAST RECTIFIERS

25 AMPERES 50 to 200 VOLTS



### **MAXIMUM RATINGS**

Rating	Symbol	MUR				
		2505	2510	2515	2520	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	VRRM VRWM VR	50	100	150	200	Volts
Nonrepetitive Peak Reverse Voltage	VRSM	55	110	165	220	Volts
Average Forward Current T <sub>C</sub> = 145°C	<sup>[</sup> F(AV)	25				Amps
Nonrepetitive Peak Surge Forward Current (half cycle 60 Hz, Sinusoidal Waveform)	FSM	500			Amps	
Operating Junction and Storage Temperature	Tj, T <sub>Stg</sub>	-65 to +175				°C

# MECHANICAL CHARACTERISTICS

CASE: Welded, hermetically sealed FINISH: All external surface corrosion resistant and terminal leads are readily

solderable

POLARITY: Cathode to Case MOUNTING POSITIONS: Any MOUNTING TORQUE: 15 in-lb max

## THERMAL CHARACTERISTICS

Rating		Symbol	All Devices	Unit	
	Thermal Resistance Junction to Case	R <sub>0</sub> JC	13	°C/W	ı

## **ELECTRICAL CHARACTERISTICS**

Maximum Instantaneous Forward Voltage Drop	٧F		Volts
(if = 25 Amp, T <sub>.J</sub> = 25°C)	1 1	0 95	1
(IF = 25 Amp TJ = 125°C)		0 80	
(if = 50 Amp, Tj = 125°C)		0 88	1
Maximum Reverse Current @ DC Voltage	I <sub>B</sub>		<b>†</b>
(T <sub>J</sub> = 25°C)	"	10	μA
(T <sub>J</sub> = 125°C)	ļ ,	10	mA
Maximum Reverse Recovery Time	trr	50	ns
(if = 1.0 Amp. di/dt = 50 Amp/ $\mu$ s. Vg = 30 V,	''		ł
T <sub>.J</sub> = 25°C)	1 1		ľ

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Quality Semi-Conductors