MUR220

ULTRAFAST EFFICIENT PLASTIC SILICON RECTIFIER

VOLTAGE: 200V CURRENT: 2.0A



FEATURE

Low power loss
High surge capability
Glass passivated chip junction
Ultra-fast recovery time for high efficiency
High temperature soldering guaranteed
250 °C/10sec/0.375" lead length at 5 lbs tension

MECHANICAL DATA

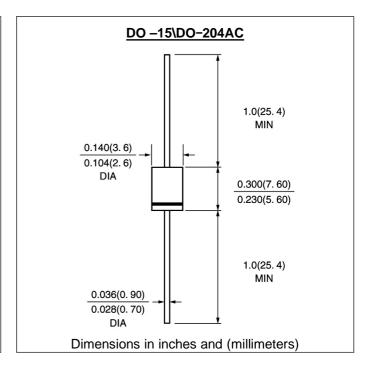
Terminal: Plated axial leads solderable per MIL-STD 202E, method 208C

Case: Molded with UL-94 Class V-0 recognized Flame

Retardant Epoxy

Polarity: color band denotes cathode

Mounting position: any



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half -wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

	SYMBOL	MUR220	units
Maximum Recurrent Peak Reverse Voltage	Vrrm	200	V
Maximum RMS Voltage	Vrms	140	V
Maximum DC blocking Voltage	Vdc	200	V
Maximum Average Forward Rectified Current 3/8" lead length at Ta =75°C	If(av)	2.0	А
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	Ifsm	35.0	А
Maximum Forward Voltage at Forward current 2A Peak	Vf	0.95	V
Maximum DC Reverse Current Ta =25°C	Ir	5.0	μА
at rated DC blocking voltage Ta =125 $^{\circ}$ C		100.0	μА
Maximum Reverse Recovery Time (Note 1)	Trr	25	nS
Typical Junction Capacitance (Note 2)	Cj	7.0	pF
Typical Thermal Resistance (Note 3)	R(ja)	60.0	°C/W
Storage and Operating Junction Temperature	Tstg,Tj	-55 to +150	°C

Note:

- 1. Reverse Recovery Condition If =0.5A, Ir =1.0A, Irr =0.25A
- 2. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
- 3. Thermal Resistance from Junction to Ambient at 3/8" lead length, P.C. Board Mounted

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RATINGS AND CHARACTERISTIC CURVES MUR220

Fig. 1 — Maximum Forward Current **Derating Curves** 3.0 Average Forward Rectified Current (A) Resistive or Inductive Load 0.375" (9.5mm) Lead Length 2.5 T_L Lead Temperature 2.0 1.5 1.0 Ta. Ambient Temperature P.C.B. Mounted 0.5° x 0.5° (12 x 12mm) Copper Pad Areas 100 125 150 175 Temperature (°C)

Peak Forward Surge Current

100

TL=75°C
3.3ms SINGLE HALF SINE-WAVE
(JEDEC Method)

10

Number of Cycles at 60 Hz

Fig. 2 — Maximum Non-Repetitive

Fig. 3 — Typical Instantaneous
Forward Characteristics

100

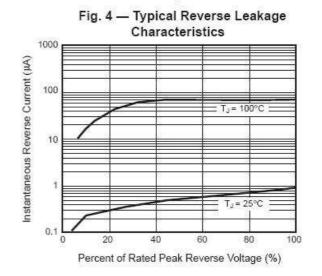
T_J = 100°C

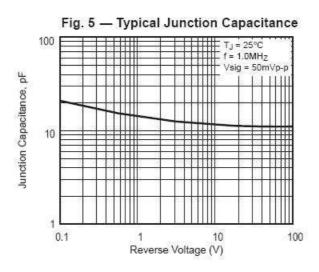
T_J = 25°C

0.1

0.01

Instantaneous Forward Voltage (V)





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