Ultra Fast Rectifier

multicomp PRO

Features:

- Ultra fast switching for high efficiency
- Low leakage current
- High forward surge capability
- Solder dip 260°C, 40s
- · 175°C operating junction temperature

RoHS Compliant

Specifications:

Mechanical Data:

Cases : JEDEC DO-41 molded plastic body

Terminals : Plated axial leads, solderable per MIL STD-750, method 2026

Polarity : Colour band denotes cathode end

Mounting Position : Any

Weight : 0.33 grams
Reverse Voltage : 600 Volts
Forward Current : 1 Ampere

Max. Ratings and Electrical Characteristics:

Rating at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristics	Symbol	Values	Units
Max. Recurrent Peak Reverse Voltage	VRRM	600	V
Max. RMS Voltage	VRMS	420	
Max. DC Blocking Voltage	VDC	600	
Max. Average Forward Rectified Current (Square Wave Note 4) at TA = 80°C	I(AV)	1	
Peak Forward Surge Current 8.3ms Single Half Sine-wave Super imposed on Rated Load (JEDEC method)	Ігѕм	35	A
Max. Instantaneous Forward Voltage at 1A	VF	1.35	V
Max. DC Reverse Current at TA = 25°C Rated DC Blocking Voltage at TA = 150°C	lR	5 50	μА
Max. Reverse Recovery Time	Trr	60	nS
Typical Junction Capacitance	Сл	20	pF
Typical Thermal Resistance (Note 2)	Reja	50	°C/W
Operating Temperature Range	TJ	-65 to +175	°C
Storage Temperature Range	Тѕтс		

Notes:

- 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC
- 2. Thermal resistance junction to ambient
- 3. The typical data above is for reference only

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Rating and Characteristic Curves

FIG. 1 – FORWARD CURRENT DERATING CURVE

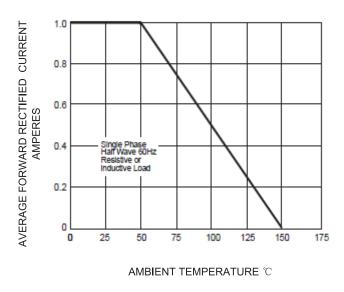
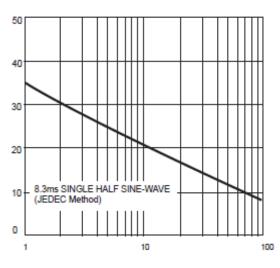


FIG. 2 – MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



NUMBER OF CYCLES AT 60Hz

FIG.3-TYPIACL REVERSE CHARACTERISTICS

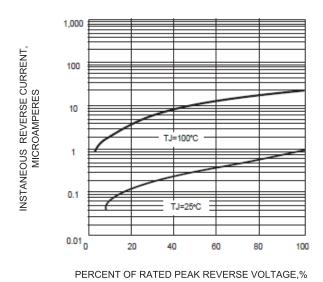
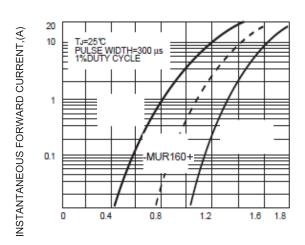


FIG.4-TYPICAL FORWARD CHARACTERISTICS



INSTANTANEOUS FORWARD VOLTAGE, VOLTS

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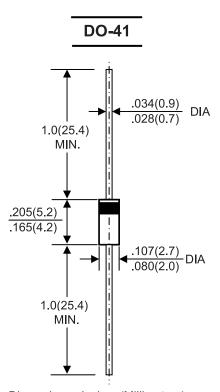


PEAK FORWARD SURGE CURRENT AMPERES

Ultra Fast Rectifier



Dimensions:



Dimensions: Inches (Millimetres)

Part Number Table

Description	Part Number
Ultra Fast Rectifier, 1A, 600V	MUR160+

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Page <3>

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