Certificate Number: Q10561

Certificate Number: E17276

MUR3040PT

SWITCHMODE POWER RECTIFIER

PRV : 400 Volts
Io : 30 Amperes

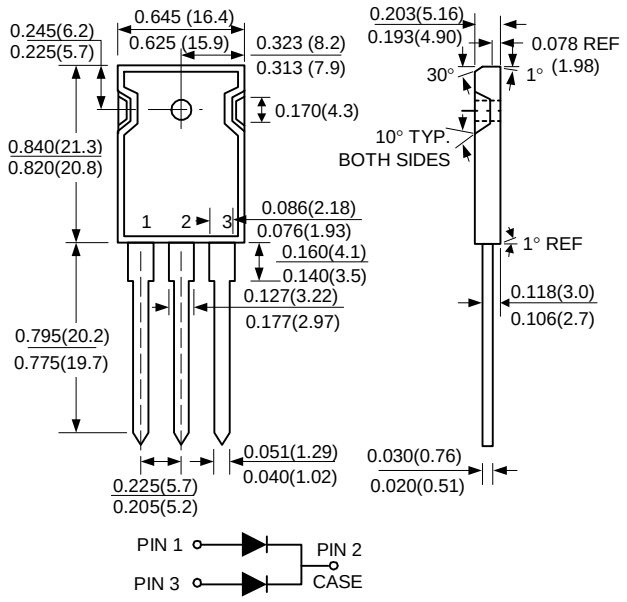
FEATURES :

* High current capability
* High surge current capability
* High reliability
* Low leakage current
* Low forward voltage drop
* Fast switching for high efficiency
* Pb / RoHS Free

MECHANICAL DATA :

* Case : TO-247AD(TO-3P)
* Lead Temperature for Soldering Purposes : 260 °C Max. for 10 Seconds
* Finish : All External Surfaces Corrosion Resistant and Terminal Lead are Readily Solderable
* Mounting position : U3040
* Weight : 4.3 grams (approximately)

TO-247AD (TO-3P)



DIMENSIONS IN INCHES AND (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

RATINGS	SYMBOL	VALUE	UNITS
Maximum Peak Repetitive Reverse Voltage	V_{RM}	400	Volts
Maximum Working Peak Reverse Voltage	V_{RWM}	400	Volts
Maximum DC Blocking Voltage	V_R	400	Volts
Maximum Average Rectified Forward Current (Rated V_R) Tc = 150 °C	$I_{F(AV)}$	15 (Per Leg)	Amps.
		30 (Per Device)	
Maximum Peak Forward Surge Current (60 Hz, Half wave,single phase) Per Leg	I_{FSM}	150	Amps.
Maximum Instantaneous Forward Voltage at I_F = 15 A	V_F	1.25	Volts
Maximum Instantaneous Reverse Current at V_R (1) Tc = 25 °C	I_R	10	µA
Tc = 150 °C	$I_{R(H)}$	500	µA
Maximum Reverse Recovery Time (2)	Trr	60	ns
Junction Temperature Range	T_J	- 65 to + 175	°C
Storage Temperature Range	T_{STG}	- 65 to + 175	°C

Notes :

(1) Pulse Test : Pulse Width = 300µs , Duty Cycle ≤ 2%

(2) Reverse Recovery Test Conditions : I_F = 1A, di/dt = 50 A/µs.

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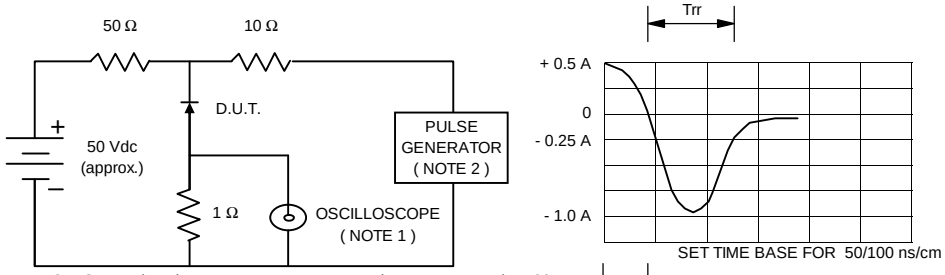
RATING AND CHARACTERISTIC CURVES (MUR3040PT)

FIG.1 - REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM



NOTES : 1. Rise Time = 7 ns max., Input Impedance = 1 megaohm, 22 pF.
2. Rise time = 10 ns max., Source Impedance = 50 ohms.
3. All Resistors = Non-inductive Types.

FIG.2 - CURRENT DERATING CURVE , CASE TEMPERATURE (PER LEG)

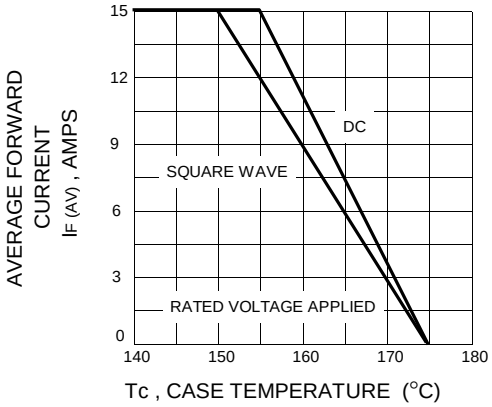


FIG.3 - POWER DISSIPATION (PER LEG)

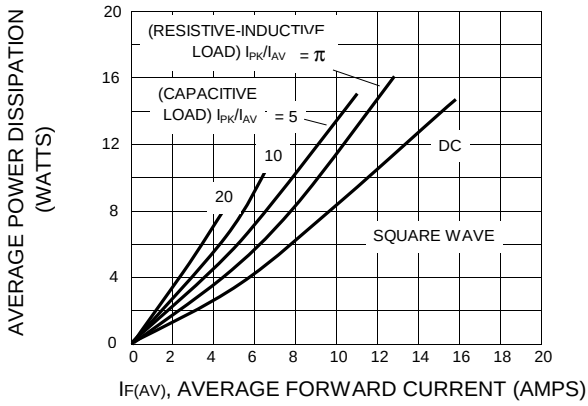


FIG.4 - TYPICAL FORWARD VOLTAGE CHARACTERISTICS (PER LEG)

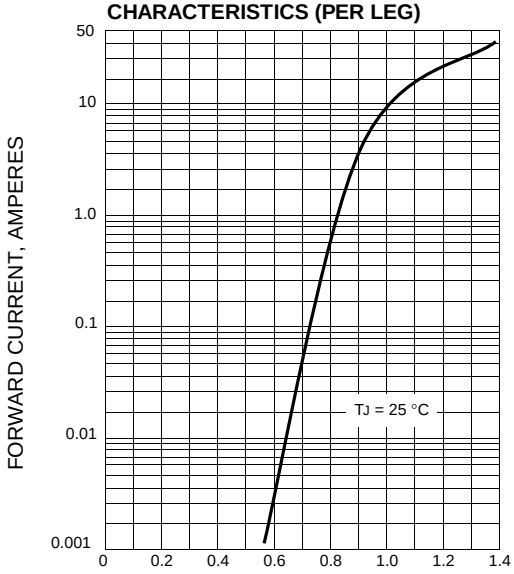


FIG.5 - TYPICAL REVERSE CURRENT CHARACTERISTICS (PER LEG)