

MUR3020PT

PRV : 200 Volts
I_o : 30 Amperes

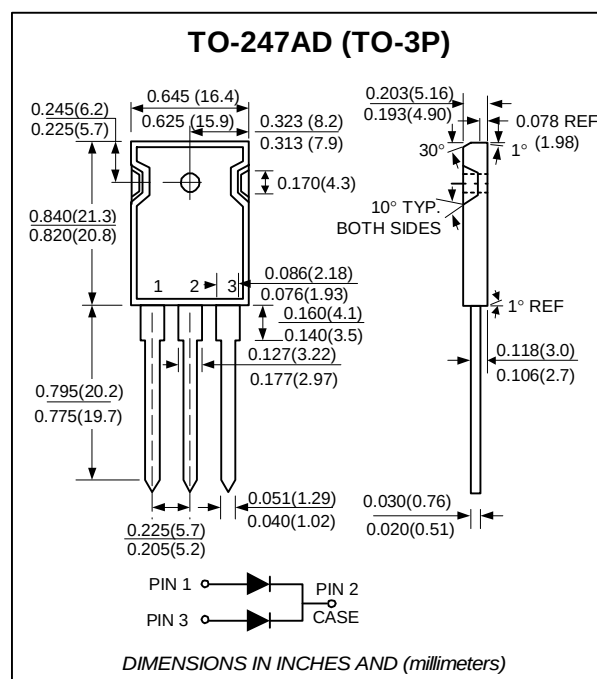
FEATURES :

- * 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)

SWITCHMODE POWER RECTIFIER



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}	200	Volts
Maximum Working Peak Reverse Voltage	V _{RWM}	200	Volts
Maximum DC Blocking Voltage	V _R	200	Volts
Maximum Average Rectified Forward Current (Rated V _R) T _c = 150 °C	I _{F(AV)}	15 (Per Leg) 30 (Per Device)	Amps.
Maximum Peak Forward Surge Current (60 Hz, Half wave, single phase) Per Leg	I _{FSM}	200	Amps.
Maximum Instantaneous Forward Voltage at I _F = 15 A	V _F	1.05	Volts
Maximum Instantaneous Reverse Current at V _R (1) T _c = 25 °C	I _R	10	μA
T _c = 150 °C	I _{R(H)}	500	μA
Maximum Reverse Recovery Time (2)	T _{rr}	35	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.

RATING AND CHARACTERISTIC CURVES (MUR3020PT)

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

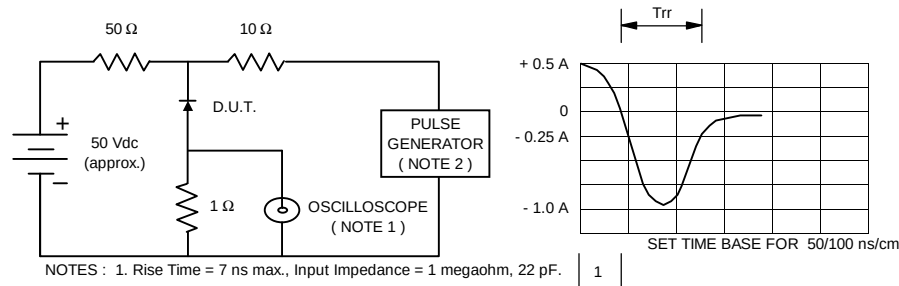


FIG.2 - CURRENT DERATING CURVE , CASE TEMPERATURE (PER LEG)

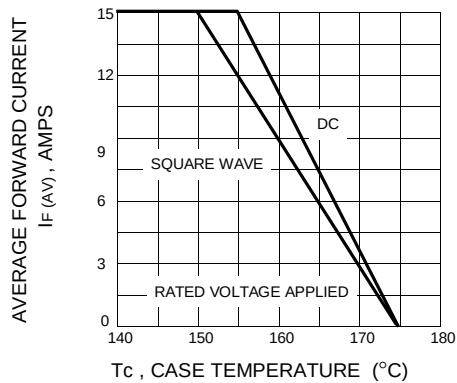


FIG.3 - POWER DISSIPATION (PER LEG)

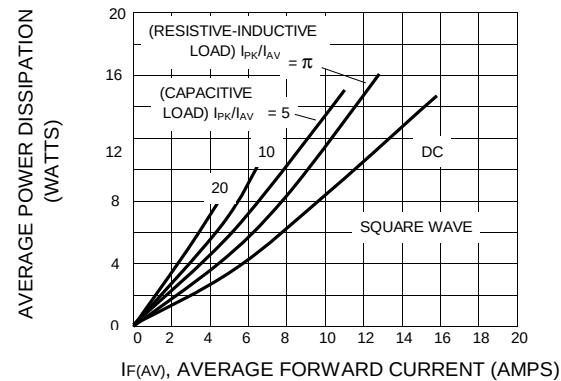


FIG.4 - TYPICAL FORWARD VOLTAGE CHARACTERISTICS (PER LEG)

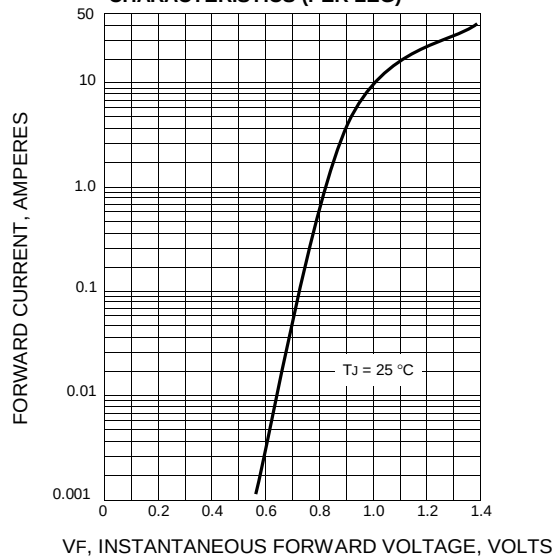


FIG.5 - TYPICAL REVERSE CURRENT CHARACTERISTICS (PER LEG)

