

MUR3020WT

PRV : 200 Volts
Io : 30 Amperes

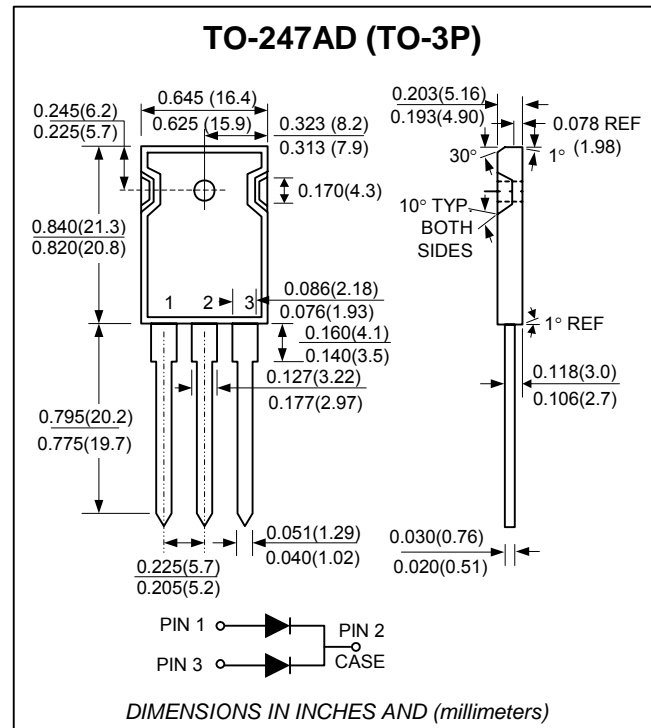
FEATURES :

- * 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)

ULTRAFAST 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_{RRM}	200	V
Maximum Working Peak Reverse Voltage	V_{RWM}	200	V
Maximum DC Blocking Voltage	V_R	200	V
Maximum Average Rectified Forward Current (Rated V_R) $T_c = 150\text{ }^\circ\text{C}$	$I_{F(AV)}$	15	A
Per Leg		30	
Maximum Peak Forward Surge Current (60 Hz, Half wave, single phase) Per Leg	I_{FSM}	200	A
Maximum Instantaneous Forward Voltage at $I_F = 15\text{ A}$	V_F	1.05	V
Maximum Instantaneous Reverse Current at V_R (Note 1) $T_J = 25\text{ }^\circ\text{C}$	I_R	10	μA
$T_J = 150\text{ }^\circ\text{C}$	$I_{R(H)}$	500	μA
Maximum Reverse Recovery Time (Note 2)	T_{rr}	35	ns
Junction Temperature Range	T_J	- 65 to + 175	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	- 65 to + 175	$^\circ\text{C}$

Notes :

- (1) Pulse Test : Pulse Width = 300 μs , Duty Cycle $\leq 2\%$
- (2) Reverse Recovery Test Conditions : $I_F = 1\text{ A}$, $di/dt = 50\text{ A}/\mu\text{s}$.

RATING AND CHARACTERISTIC CURVES (MUR3020WT)

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

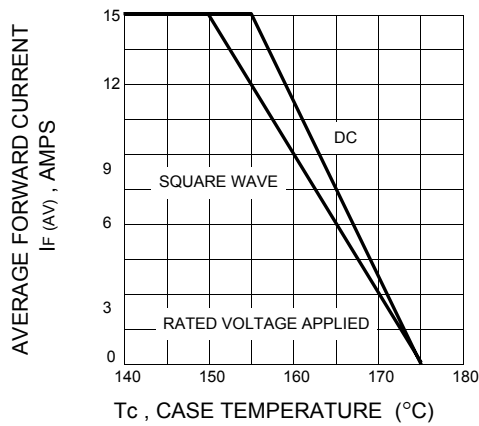


FIG.3 - POWER DISSIPATION (PER LEG)

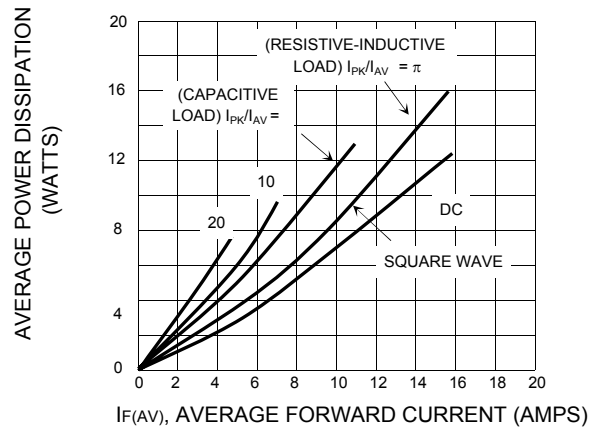


FIG.4 - TYPICAL FORWARD VOLTAGE CHARACTERISTICS (PER LEG)

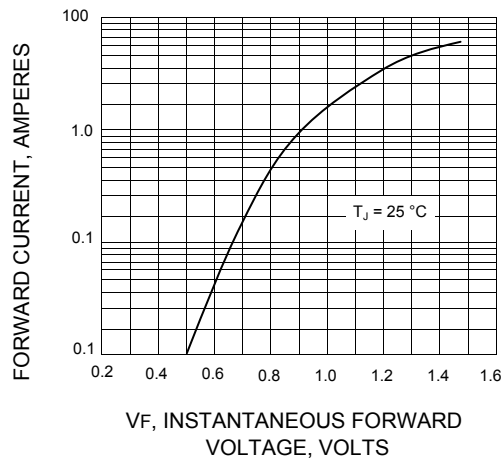


FIG.5 - TYPICAL REVERSE CURRENT CHARACTERISTICS (PER LEG)

