

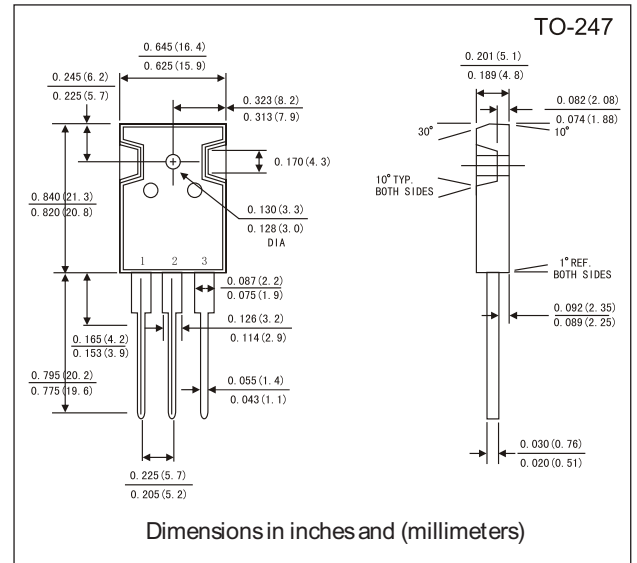
## ULTRA FAST RECTIFIER

### FEATURES

- Fred Chip Planar Construction
- SuperFast Switching,High Efficiency
- Low Power loss, High Efficiency
- Low Reverse Leakage Current
- High Surge Current Capability
- Plastic Material has UL Flammability Classification 94V-O

### MECHANICAL DATA

- Case: TO-247AD/TO-3P, Molded Plastic
- Terminals:Pure tin Plated ,Lead free Solderable per MIL-STD-750, Method 2026
- Polarity: As marked
- Weight: 5.6 grams(approx)
- Mounting Position:Any



### Maximum Ratings and Electrical Characteristics @T<sub>A</sub>=25°C unless otherwise specified

- Single Phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	MUR 3010PT	MUR 3020PT	MUR 3030PT	MUR 3040PT	MUR 3050PT	MUR 3060PT	Unit	
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	100	200	300	400	500	600	V	
Maximum RMS Voltage	V <sub>RMS</sub>	70	140	210	280	350	420	V	
Maximum DC Blocking Voltage	V <sub>DC</sub>	100	200	300	400	500	600	V	
Maximum Average Forward Current (See Figure 1)	I <sub>F(AV)</sub>	Per Leg Total Device						15 30	A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	300						A	
Maximum Forward Voltage at 15A per leg	V <sub>F</sub>	0.975		1.3		1.7		V	
Maximum DC Reverse Current at Rated DC Blocking Voltage	I <sub>R</sub>	TA =25°C TA =100°C						5 500	uA
Maximum Reverse Recovery Time (Measured With IF=0.5A, IR=1.0A,IRR=0.25A)	T <sub>rr</sub>	35		50				nS	
Typical Thermal Resistance Junction to Ambient	R <sub>θJA</sub>	40.0						°C/W	
Typical Thermal Resistance Junction to Case	R <sub>θJC</sub>	1.0						°C/W	
Operating Junction and Storage Temperature Range	T <sub>J</sub> ,T <sub>STG</sub>	-65 to +175						°C	

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### RATING AND CHARACTERISTIC CURVES MUR3010PT - MUR3060PT

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

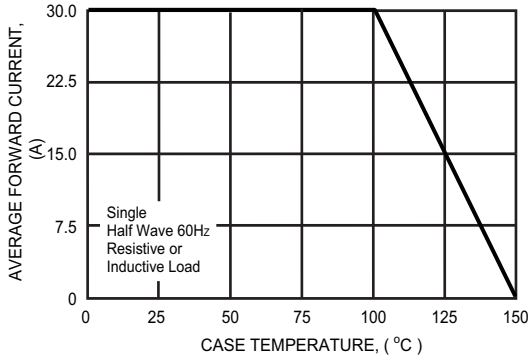


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

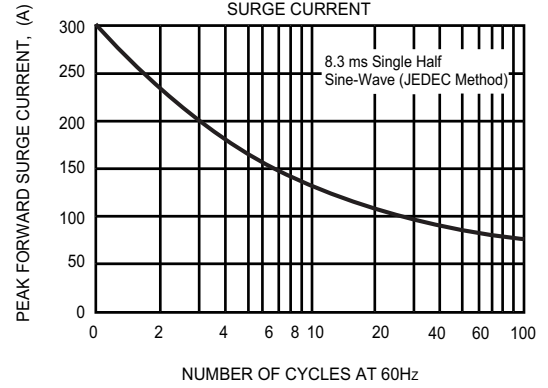


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

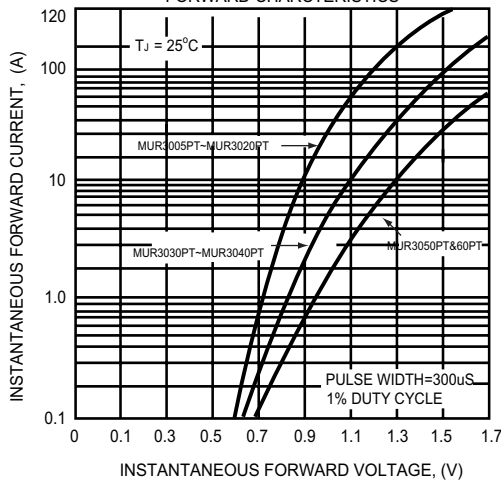


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

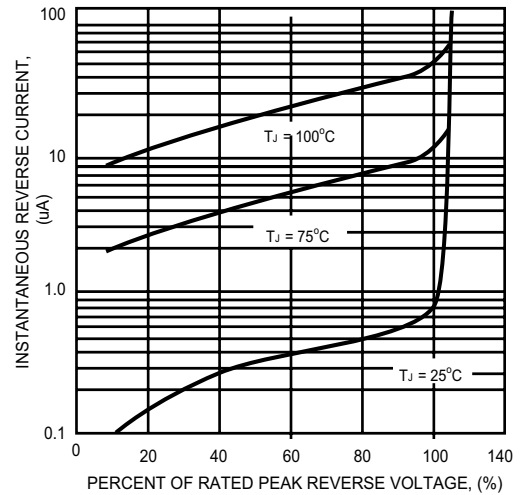
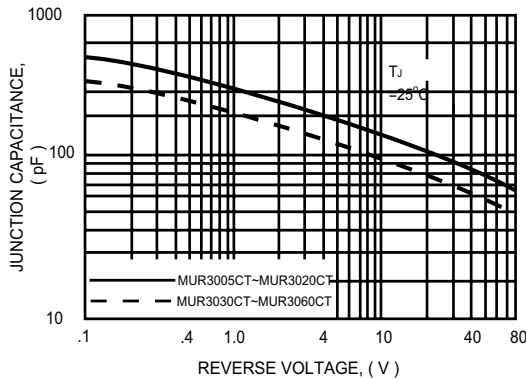


FIG. 5 - TYPICAL JUNCTION CAPACITANCE



#### Disclaimer

All product, product specifications and data are subject to change without notice to improve reliability, function or design or otherwise