

POLYIMIDE PASSIVATED SUPER FAST RECTIFIER

Reverse Voltage - 200-600 Volts
 Forward Current - 60.0Amperes

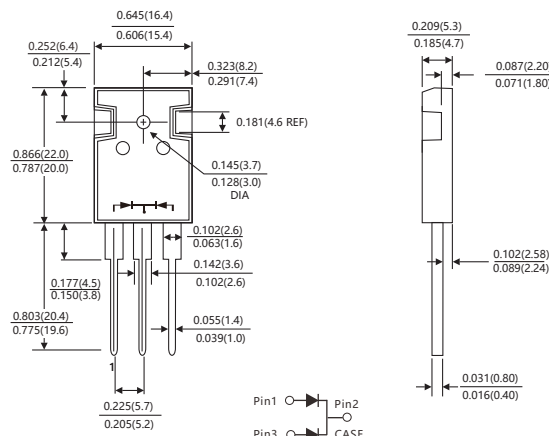
Features:

- Fred Chip Planar Construction
- Super Fast Switching,High Efficiency
- Low Power loss, High Efficiency
- Low Reverse Leakage Current
- High Surge Current Capability
- Plastic Material has UL Flammability Classification 94V-0

TO-247

Mechanical Data:

- Case: TO-247AB, Molded Plast
- Terminals:Pure tin Plated ,Lead free Solderable per MIL-STD-750, Method 2026
- Polarity: As marked
- Mounting Position:Any



Applications:

- For use in High Frequency Rectifier of Switching Mode Power Supplies, Freewheeling Diode, DC/DC Converters or polarity Protection Application

Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics @ $T_J = 25^\circ\text{C}$ unless otherwise specified

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

Parameters	Symbol	KMUR6020PT	KMUR6030PT	KMUR6040PT	KMUR6060PT	Unit
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	200	300	400	600	V
Maximum RMS Voltage	V _{RMS}	140	210	280	420	V
Maximum DC Blocking Voltage	V _{DC}	200	300	400	600	V
Maximum Average Forward (See Figure 1)	I _{F(AV)}	60				A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load(JEDEC method,Total device)	I _{FSM}	350				A
Maximum Forward Voltage at 30A per leg (Note2)	V _F	1.05	1.35		1.70	V
Maximum DC Reverse Current at T _J =25°C	I _R	5				μA
Rated DC Blocking Voltage T _J =125°C		50				
Maximum Reverse Recovery Time (Measured With IF=0.5A, IR=1.0A,IRR=0.25A)	T _{rr}	35	50			nS
Typical Thermal Resistance (Note1)	R _{θJC}	1.0				°C/W
Operating Junction and Storage Temperature Range	T _J ,T _{STG}	-55 to +175				°C

Note: (1). Thermal resistance from junction to case

(2). Pulse test: 300us pulse width, 1% duty cycle

RATING AND CHARACTERISTIC CUEVES

Fig-1 FORWARD CURRENT DERATING CURVE

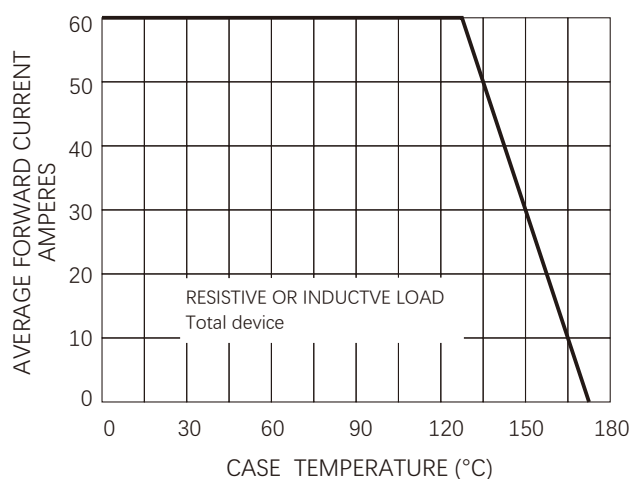


Fig-2 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

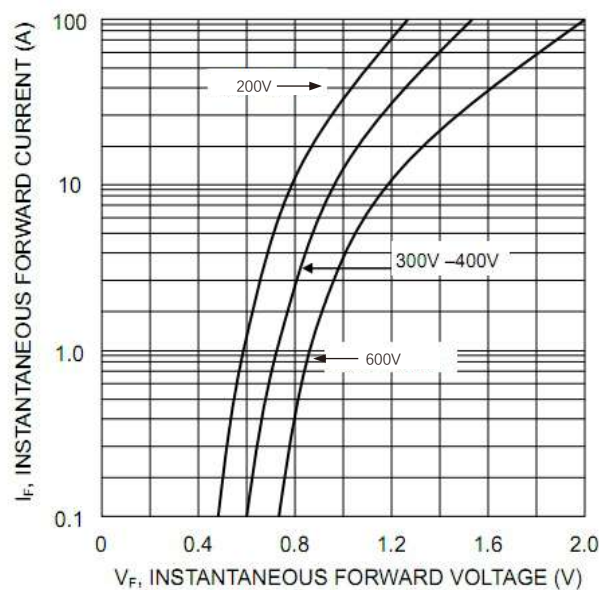


Fig-3 TYPICAL REVERSE CHARACTERISTICS

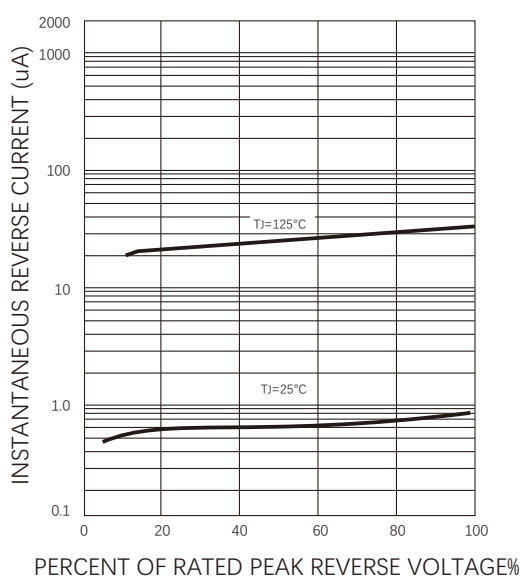


Fig-4 MAXIMUM NON-REPETITIVE SURGE CURRENT

