MUR3005CT THRU MUR3060CT

TO-247

KI SEMICONDUCTOR

ULTRA FSAT RECTIFIER

VOLTAGE RANGE 50 - 600 Volts **CURRENT 30 Amperes**

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Dual rectifier construction, positive centertap Glass passivated chip junctions
- Low power loss
- Low forward voltage, high current capability
- High surge current capability
- Ultra fast recovery times for high efficiency
- High temperature soldering guaranteed : 260°C/10 seconds at terminals

MECHANICAL DATA

Case: JEDEC TO-247 molded plastic

Terminals: Lead solderable per MIL-STD-750,

Method 2026

Polarity: As marked

Weight: 5.6 grams (Approximately)

0. 201 (5. 1) 0.082(2.08) 10° TYP. BOTH SIDES 1° REF. BOTH SIDES 0. 087 (2. 2) 0. 075 (1. 9) 0. 092 (2. 35) 0. 089 (2. 25) 0. 126 (3. 2) 0. 114 (2. 9) 0. 165 (4. 2) 0. 795 (20. 2) 0. 775 (19. 6) 0.030(0.76)

Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings 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%.

MAXIMUM RATINGES (At TA = 25°C unless otherwise noted)

RATINGS	SYMBOL	MUR3005C1	MUR3010CT	MUR3015CT	MUR3020CT	MUR3030CT	MUR3040CT	MUR3050CT	MUR3060CT	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	150	200	300	400	500	600	Volts
Maximum RMS Voltage	VRMS	35	70	105	140	210	280	350	420	Volts
Maximum DC Blocking Voltage	VDC	50	100	150	200	300	400	500	600	Volts
Maximum Average Forward Rectified Current	lo	30.0								Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	300							Amps	
Typical Junction capacitance per leg (NOTE 1)	Cı	200 140					pF			
Typical thermal resistance (NOTE 2)	RθJC	1.0							°C / W	
Operating and Storage Temperature Range	TJ, TSTG	-65 to +175							°C	

ELECTRICAL CHARACTERISTICS (At TA = 25°C unless otherwise noted)

CHARACTERISTICS		SYMBOL	MUR3005CT N	MUR3010CT N	MUR3015CT	MUR3020CT	MUR3030CT	MUR3040CT	MUR3050CT	MUR3060CT	UNITS
Maximum Instantaneous Forward Voltage at 15.0 A DC		VF	0.975		1.30		1.50		Volts		
Maximum DC reverse current Tc = 25°C		l _R	10.0								uAmps
at rated DC blocking voltage per leg	Tc = 100°C	IK	500								uAmps
Maximum reverse recovery time (NOTE 3) per leg		trr	35		50				nS		

NOTES: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts

2. Thermal resistance from junction to case per leg mounted on heatsink

3. Reverse recovery test conditions : IF = 0.5 A, Ir = -1.0 A, Irr = -0.25 A.

4. Suffix " C " = Common Cathod, Suffix " A " = Common Anode, Suffix " D " = Double.

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