

Micro Commercial Components

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Features

- High Surge Capability
- Low Forward Voltage Drop
- High Current Capability
- Super Fast Switching Speed For High Efficiency
- Case Material: Molded Plastic. UL Flammability
- Classification Rating 94V-0

Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C

	Maximum		Maximum DC
MCC	Recurrent	Maximum	Blocking
Part Number	Peak Reverse	RMS	Voltage
	Voltage	Voltage	_
MUR3005PT	50V	35V	50V
MUR3010PT	100V	70V	100V
MUR3020PT	200V	140V	200V
MUR3030PT	300V	210V	300V
MUR3040PT	400V	280V	400V
MUR3060PT	600V	420V	600V

Electrical Characteristics @ 25°C Unless Otherwise Specified

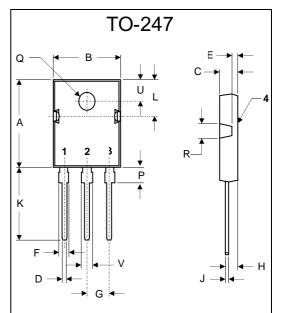
Average Forward	I _{F(AV)}	30 A	T _c = 125°C
Current			
Peak Forward Surge	I _{FSM}	300A 8.3ms, half sine	
Current			
Maximum			
Instantaneous			
Forward Voltage			
MUR3005PT-3020PT	V _F	0.95V	I _{FM} = 15.0A;
MUR3030PT -3040PT		1.30V	T _C = 25°C
MUR3060PT		1.50V	
Maximum DC			
Reverse Current At	I _R	10µA	T _C = 25°C
Rated DC Blocking		500µA	T _c = 125°C
Voltage			
Maximum Reverse			
Recovery Time			
MUR3005PT-3020PT	T _{rr}	35ns	I _F =0.5A, I _R =1.0A,
MUR3030PT-3060PT		50ns	I _{rr} =0.25A

*Pulse Test: Pulse Width 300µsec, Duty Cycle 1%

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MUR3005PT THRU MUR3060PT

30 Amp Super Fast Recovery Rectifier 50 to 600 Volts



DIMENSIONS								
	INCHES		MM					
DIM	MIN	MAX	MIN	MAX	NOTE			
А	.837	.856	21.25	21.75				
В	.620	.640	15.75	16.25				
С	.192	.202	4.87	5.13				
D	.044	.048	1.12	1.22				
Е	.074	.082	1.88	2.08				
F	.075	.085	1.90	2.16				
G	.205	.224	5.20	5.70				
Н	.083	.095	2.10	2.40				
J	.020	.030	0.51	0.76				
K	.772	.791	19.60	20.10				
L	.286	.295	7.26	7.50				
Р	.149	.172	3.78	4.38				
Q	.114	.126	2.90	3.20	Ø			
R	.173TYP		4.40TYP					
U	.209	BSC	5.30	BSC				
V	.115	.127	2.93	3.22				

2007/12/26

Revision: 4



MUR3005PT THRU MUR3060PT

30

25

20

15

10

5

0

100

10

1.0

0 1

0.2 0.4 0.6 0.8

IINSTANTANEOUS FORWARD CURRENT, AMPERES 0

60 Hz Resistive of Inductive load

> . 3005PT

~3020P

50

Case TEMPERATURE, °C

FIG.3 - TYPICAL INSTANTANEOUS

FORWARD CHARACTERISTICS

=3030PT~3040PT

3060P

PULSE WIDTH=300uS 1% DUTY CYCLE

1.0 1.2 1.4

INSTANTANEOUS FORWARD VOLTAGE, VOLTS

1.6

100

150

AVERAGE FORWARD RECTIFIED CURRENT, AMPERES

FIG.1 - FORWARD CURRENT DERATING CURVE

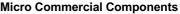


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

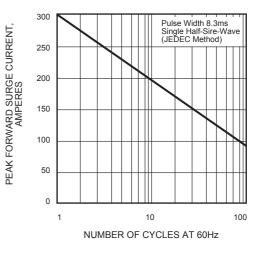
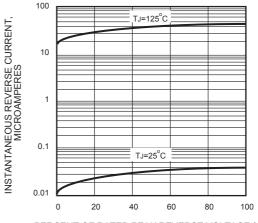
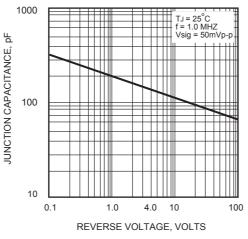


FIG.4 - TYPICAL REVERSE CHARACTERISTICS



PERCENT OF RATED PEAK REVERSE VOLTAGE,%

FIG.5 - TYPICAL JUNCTION CAPACITANCE



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