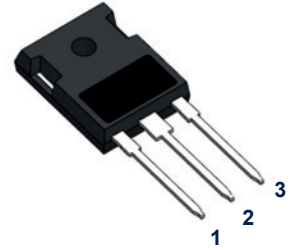


GSMUR2010PT thru GSMUR2060PT

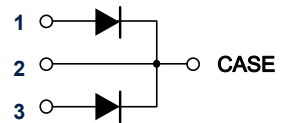
Super Fast Recovery Rectifiers
 Reverse Voltage 100V to 600V Forward Current 20A

Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Fast switching for high efficiency
- Low forward voltage drop
- Low reverse leakage current
- High surge capability
- High temperature soldering guaranteed: 260°C/10 seconds, 0.25" (6.35mm) from case
- Component in accordance to RoHS 2011/65/EU



TO-247AB



Schematic Diagram

Mechanical Data

- Case: TO-247AB molded plastic body
- Terminals: Lead solderable per MIL-STD-750, method 2026 Polarity: As marked.
- Mounting Position: Any

Maximum Ratings and Electrical Characteristics

(Ratings at 25°C ambient temperature unless otherwise specified, Single phase, half wave, resistive or inductive load. For capacitive load, derate by 20%)

Parameter	Symbol	GSMUR 2010PT	GSMUR 2020PT	GSMUR 2030PT	GSMUR 2040PT	GSMUR 2050PT	GSMUR 2060PT	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	100	200	300	400	500	600	V
Maximum RMS Voltage	V_{RMS}	70	140	210	280	350	420	V
Maximum DC Blocking Voltage	V_{DC}	100	200	300	400	500	600	V
Maximum Average Forward Rectified Current (see Fig.1)	Per leg	10						A
	Total device	20						
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	200						A
Maximum Instantaneous Forward Voltage at 10.0A Per leg ¹	V_F	1.0		1.3		1.7		V
Maximum Instantaneous Reverse Current at Rated DC Blocking Voltage ¹	$T_A=25^\circ\text{C}$	5						uA
	$T_A=125^\circ\text{C}$	50						
Maximum Reverse Recovery Time ²	t_{rr}	35		50				nS
Typical Thermal Resistance ³	$R_{\theta JC}$	1.0						°C/W
Operating Junction Temperature Range	T_J	-55 to +150						°C
Storage Temperature Range	T_{STG}	-55 to +150						°C

Notes:

1. Pulse test: 300us pulse width, 1% duty cycle.
2. Reverse recovery test conditions $I_F=0.5A$, $I_R=1.0A$, $I_{rr}=0.25A$.
3. Thermal resistance from junction to case.

Ratings and Characteristic Curves

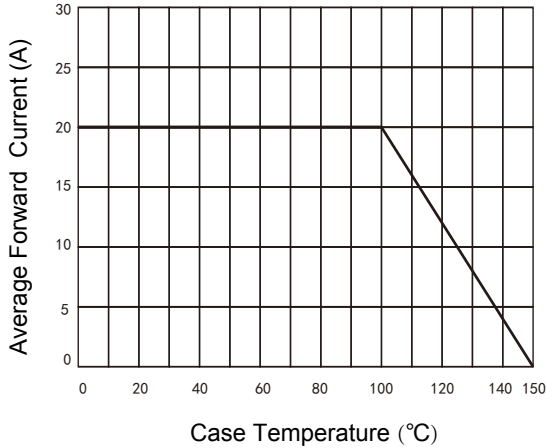


Figure 1. Forward Current Derating Curve

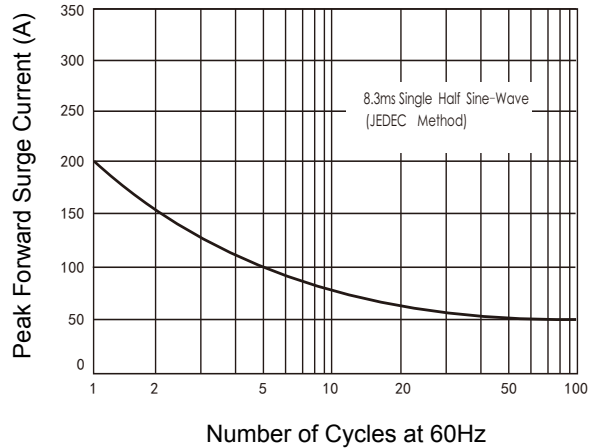


Figure 2. Max. Non-Repetitive Peak Forward Surge Current

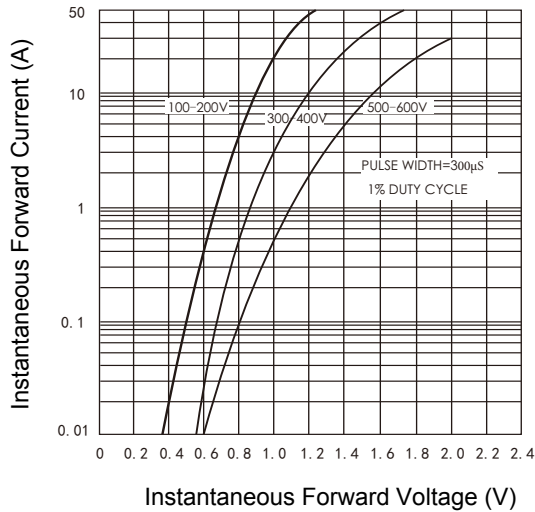


Figure 3. Typical Instantaneous Forward Characteristics

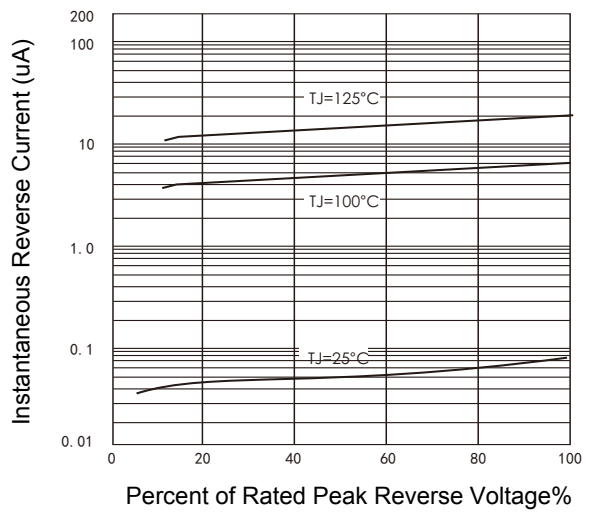
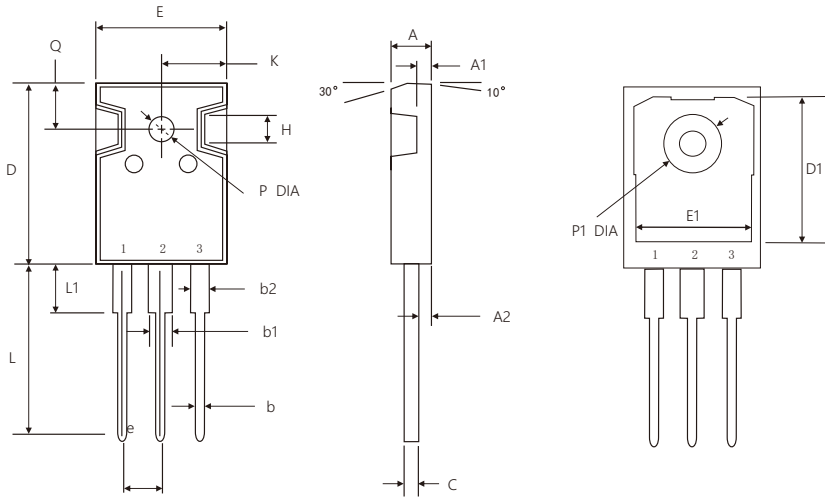


Figure 4. Typical Reverse Characteristics

GSMUR2010PT thru GSMUR2060PT

Super Fast Recovery Rectifiers
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Package Outline Dimensions (TO-247AB)



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	4.70	5.30	0.185	0.209
A1	1.80	2.20	0.071	0.087
A2	2.24	2.58	0.088	0.102
b	1.00	1.40	0.039	0.055
b1	2.60	3.60	0.102	0.142
b2	1.60	2.60	0.063	0.102
C	0.40	0.80	0.016	0.031
D	20.00	22.00	0.787	0.866
D1	16.25	16.85	0.640	0.663
E	15.4	16.4	0.606	0.646
E1	13.10	13.50	0.516	0.531
L	19.60	20.40	0.772	0.803
e	5.20	5.70	0.205	0.224
L1	3.80	4.50	0.150	0.177
P	3.30	3.70	0.130	0.146
P1	-	7.30	-	0.287
Q	5.40	6.40	0.213	0.252
K	7.40	8.20	0.291	0.323
H	4.60 TYP		0.181 TYP	



GSMUR2010PT thru GSMUR2060PT

Super Fast Recovery Rectifiers
Reverse Voltage 100V to 600V Forward Current 20A

Order Information

Device	Package	Marking	Carrier	Quantity
GSMUR2010PT	TO-247AB	MUR2010PT	Tube	30 Units / Tube
GSMUR2020PT	TO-247AB	MUR2020PT	Tube	30 Units / Tube
GSMUR2030PT	TO-247AB	MUR2030PT	Tube	30 Units / Tube
GSMUR2040PT	TO-247AB	MUR2040PT	Tube	30 Units / Tube
GSMUR2050PT	TO-247AB	MUR2050PT	Tube	30 Units / Tube
GSMUR2060PT	TO-247AB	MUR2060PT	Tube	30 Units / Tube