

2A, 600V Glass Passivated High Efficient Rectifier

FEATURES

- Glass passivated chip junction
- Compliant to RoHS Directive 2011/65/EU and in accordance to WEEE 2002/96/EC
- Halogen-free according to IEC 61249-2-21

APPLICATIONS

- High frequency rectification
- Freewheeling application
- Switching mode converters and inverters in computer, automotive and telecommunication

MECHANICAL DATA

- Case: DO-204AC (DO-15)
- Molding compound meets UL 94V-0 flammability rating
- Terminal: Pure tin plated leads, solderable per J-STD-002
- Meet JESD 201 class 2 whisker test
- Polarity: As marked
- Weight: 0.4 g (approximately)

KEY PARAMETERS		
PARAMETER	VALUE	UNIT
$I_{F(AV)}$	2	A
V_{RRM}	600	V
I_{FSM}	35	A
$T_{J\ MAX}$	175	°C
Package	DO-204AC (DO-15)	
Configuration	Single die	



DO-204AC (DO-15)

ABSOLUTE MAXIMUM RATINGS ($T_A = 25^\circ\text{C}$ unless otherwise noted)			
PARAMETER	SYMBOL	MUR260	UNIT
Marking code on the device		MUR260	
Repetitive peak reverse voltage	V_{RRM}	600	V
Reverse voltage, total rms value	$V_{R(RMS)}$	420	V
Forward current	$I_{F(AV)}$	2	A
Surge peak forward current, 8.3 ms single half sine-wave superimposed on rated load per diode	I_{FSM}	35	A
Junction temperature	T_J	- 55 to +175	°C
Storage temperature	T_{STG}	- 55 to +175	°C

THERMAL PERFORMANCE			
PARAMETER	SYMBOL	TYP.	UNIT
Junction-to-lead thermal resistance per diode	$R_{\theta JL}$	17	$^{\circ}C/W$
Junction-to-ambient thermal resistance per diode	$R_{\theta JA}$	62	$^{\circ}C/W$
Junction-to-case thermal resistance per diode	$R_{\theta JC}$	18	$^{\circ}C/W$

Thermal Performance Note: Units mounted on recommended PCB (10mm x 10mm Cu pad test board)

ELECTRICAL SPECIFICATIONS ($T_A = 25^{\circ}C$ unless otherwise noted)					
PARAMETER	CONDITIONS	SYMBOL	TYP.	MAX.	UNIT
Forward voltage per diode ⁽¹⁾	$I_F = 1A, T_J = 25^{\circ}C$	V_F	0.99	1.19	V
	$I_F = 2A, T_J = 25^{\circ}C$		1.09	1.35	V
	$I_F = 1A, T_J = 150^{\circ}C$		0.79	0.95	V
	$I_F = 2A, T_J = 150^{\circ}C$		0.87	1.15	V
Reverse current @ rated V_R per diode ⁽²⁾	$T_J = 25^{\circ}C$	I_R	-	5	μA
	$T_J = 150^{\circ}C$		-	100	μA
Junction capacitance	1 MHz, $V_R = 4.0V$	C_J	26	-	pF
Reverse recovery time	$I_F = 0.5A, I_R = 1.0A$ $I_{RR} = 0.25A$	t_{rr}	-	50	ns

Notes:

1. Pulse test with $PW = 0.3$ ms
2. Pulse test with $PW = 30$ ms

ORDERING INFORMATION		
ORDERING CODE (Note 1)	PACKAGE	PACKING
MUR260HA0G	DO-15	1,500 / Ammo box
MUR260HR0G	DO-15	3,500 / 13" Paper reel
MUR260HB0G	DO-15	1,000 / Bulk packing
MUR260 A0G	DO-15	1,500 / Ammo box
MUR260 R0G	DO-15	3,500 / 13" Paper reel
MUR260 B0G	DO-15	1,000 / Bulk packing

Note:

1. "H" means AEC-Q101 qualified

CHARACTERISTICS CURVES

($T_A = 25^\circ\text{C}$ unless otherwise noted)

Fig.1 Forward Current Derating Curve

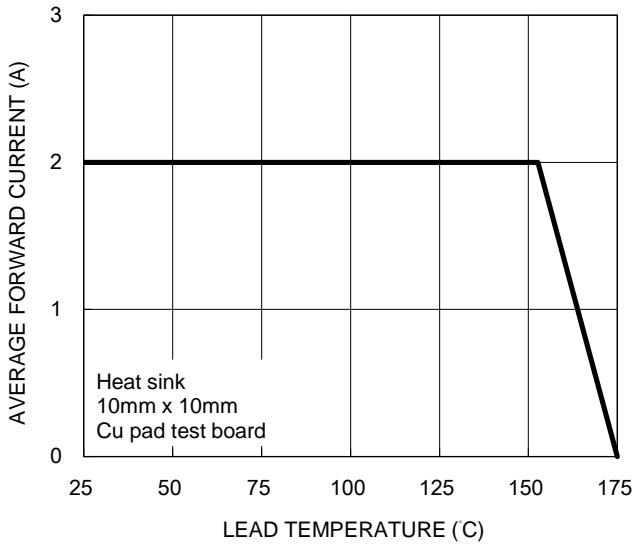


Fig.2 Typical Junction Capacitance

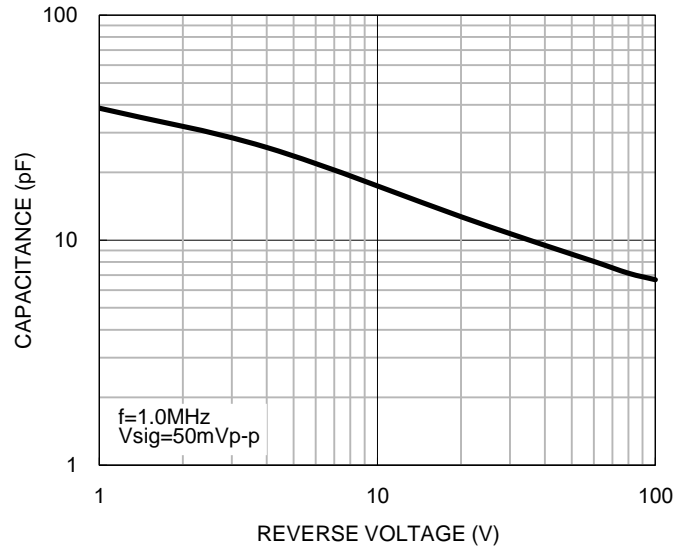


Fig.3 Typical Reverse Characteristics

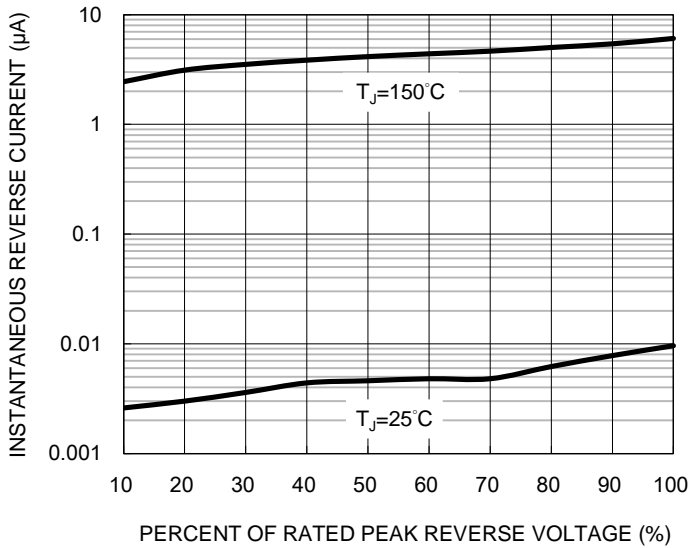
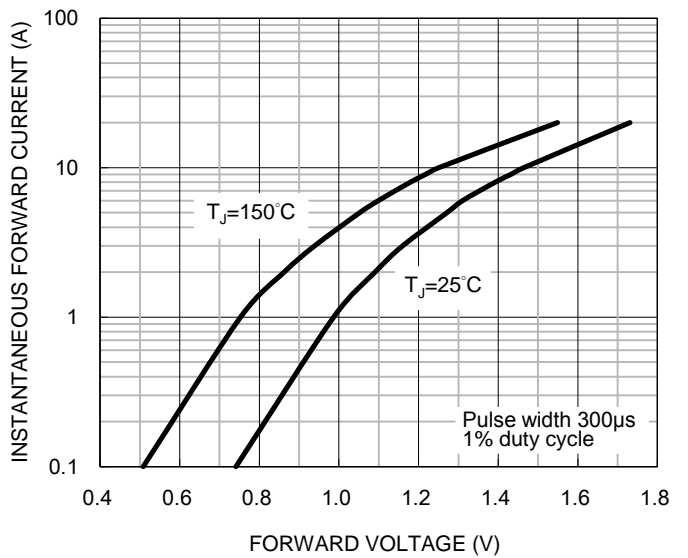
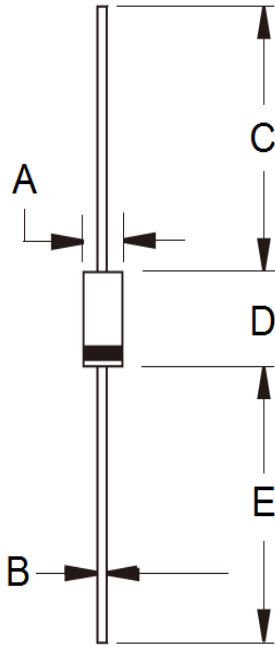


Fig.4 Typical Forward Characteristics



PACKAGE OUTLINE DIMENSIONS

DO-204AC (DO-15)



DIM.	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	2.60	3.60	0.102	0.142
B	0.70	0.90	0.028	0.035
C	25.40	-	1.000	-
D	5.80	7.60	0.228	0.299
E	25.40	-	1.000	-

MARKING DIAGRAM



- P/N = Marking Code
- G = Green Compound
- YWW = Date Code
- F = Factory Code

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