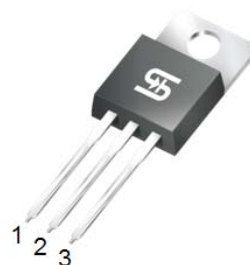


16A, 200V - 600V Switch mode Power Rectifiers

FEATURES

- Ultrafast recovery times
- 175°C operating junction temperature
- Popular TO-220AB Package
- High temperature glass passivated junction
- High voltage capability to 600 volts
- Compliant to RoHS Directive 2011/65/EU and in accordance to WEEE 2002/96/EC
- Halogen-free according to IEC 61249-2-21



TO-220AB



MECHANICAL DATA

Case: TO-220AB

Molding compound, UL flammability classification rating 94V-0

Part no. with suffix "H" means AEC-Q101 qualified

Packing code with suffix "G" means green compound (halogen-free)

Terminal: Matte tin plated leads, solderable per JESD22-B102

Meet JESD 201 class 2 whisker test

Polarity: As marked

Mounting torque: 0.56 Nm max.

Weight: 1.82 g (approximately)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T _A =25°C unless otherwise noted)					
PARAMETER	SYMBOL	MUR 1620CT	MUR 1640CT	MUR 1660CT	UNIT
Maximum repetitive peak reverse voltage	V _{RRM}	200	400	600	V
Maximum RMS voltage	V _{RMS}	140	280	420	V
Maximum DC blocking voltage	V _{DC}	200	400	600	V
Maximum average forward rectified current	I _{F(AV)}	16			A
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I _{FSM}	100			A
Maximum instantaneous forward voltage @ 8 A (Note 1) T _J =25°C T _J =150°C	V _F	0.975 0.895	1.3 1.1	1.5 1.2	V
Maximum reverse current @ rated V _R T _J =25°C T _J =125°C	I _R	5 250	10 500		μA
Maximum reverse recovery time (Note 2)	t _{rr}	25	50		ns
Typical thermal resistance	R _{θJC}	3	2		°C/W
Operating junction temperature range	T _J	- 55 to +175			°C
Storage temperature range	T _{STG}	- 55 to +175			°C

Note 1: Pulse test with PW=300μs, 1% duty cycle

Note 2: Test conditions: I_F=0.5A, I_R=1.0A, I_{RR}=0.25A.

ORDERING INFORMATION					
PART NO.	PART NO. SUFFIX	PACKING CODE	PACKING CODE SUFFIX (*)	PACKAGE	PACKING
MUR16x0CT (Note 1)	H	C0	G	TO-220AB	50 / Tube

Note 1: "x" defines voltage from 200V (MUR1620CT) to 600V (MUR1660CT)

*: Optional available

EXAMPLE					
EXAMPLE PART NO.	PART NO.	PART NO. SUFFIX	PACKING CODE	PACKING CODE SUFFIX	DESCRIPTION
MUR1660CTHC0G	MUR1660CT	H	C0	G	AEC-Q101 qualified Green compound

RATINGS AND CHARACTERISTICS CURVES

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

FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

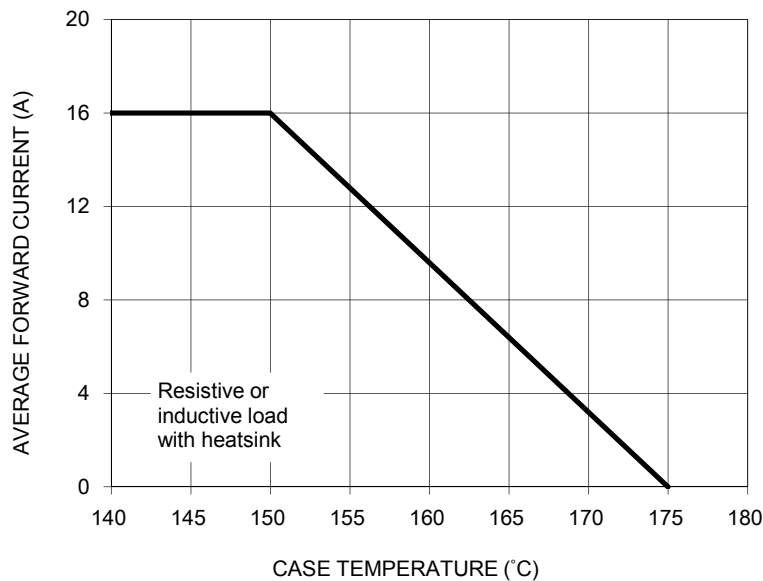


FIG. 2 TYPICAL REVERSE CHARACTERISTICS

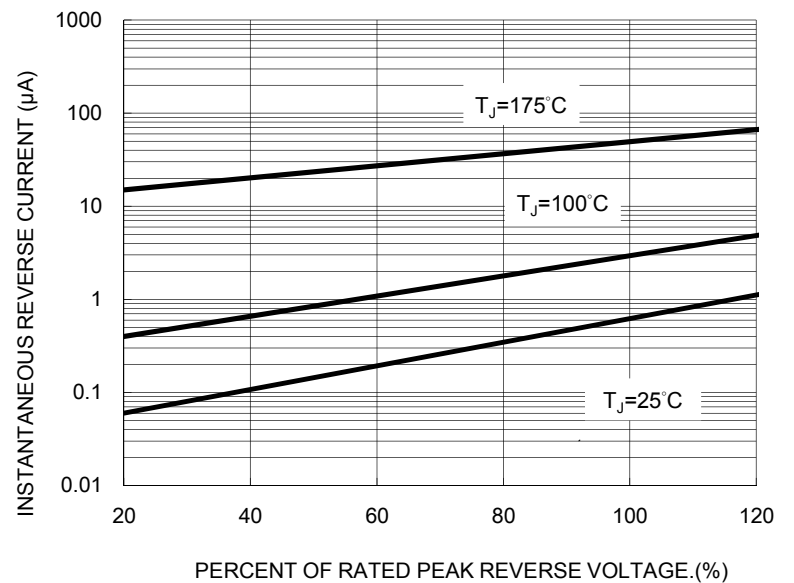


FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

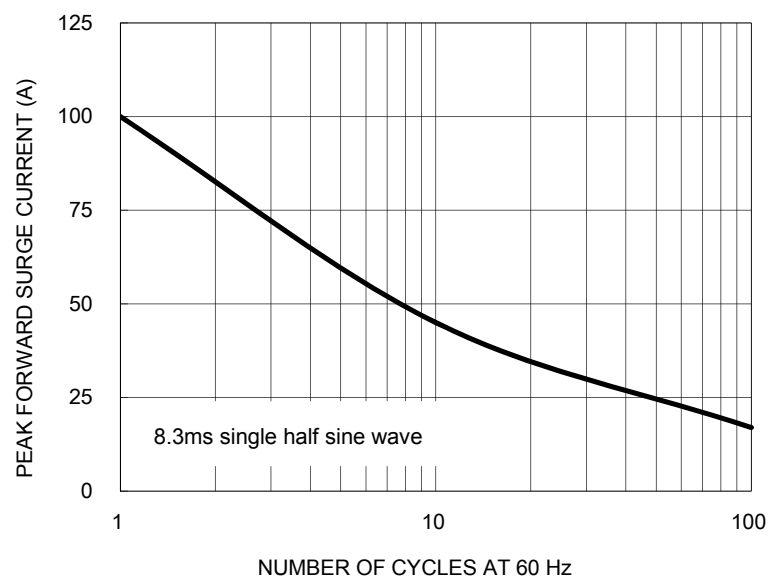


FIG. 4 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

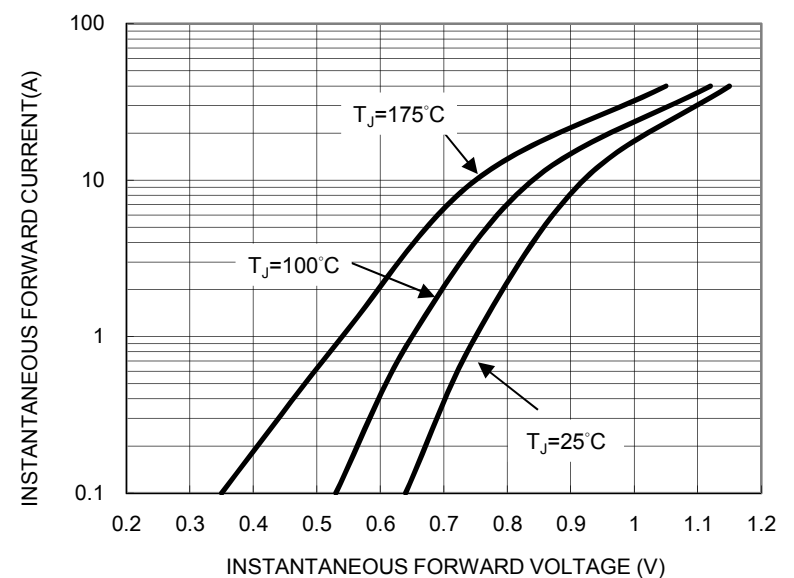


FIG. 5 TYPICAL JUNCTION CAPACITANCE

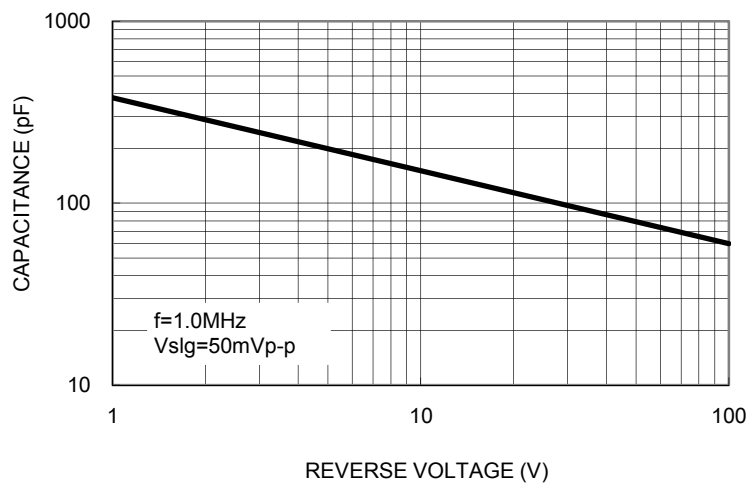
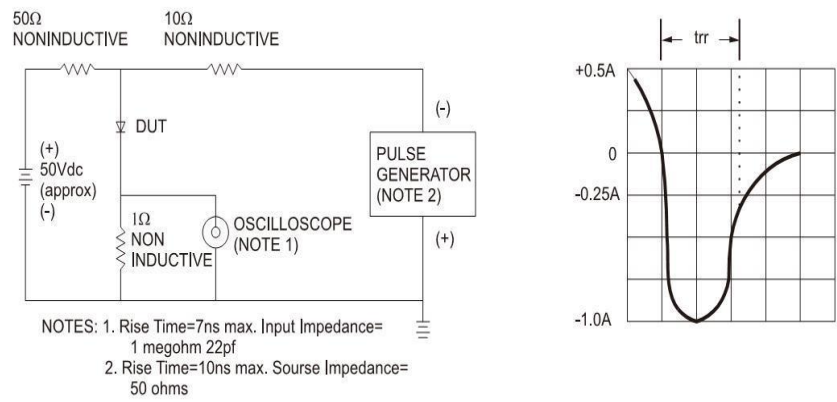
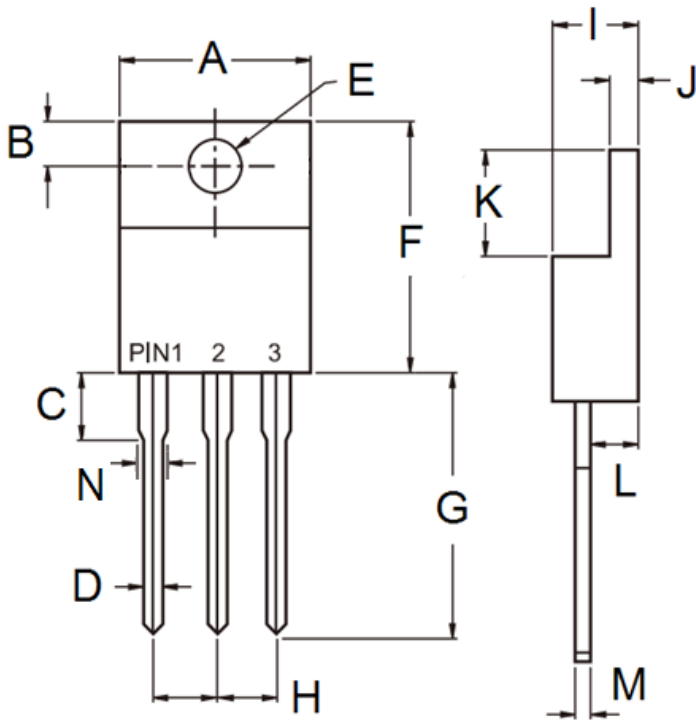


FIG.6 REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM



PACKAGE OUTLINE DIMENSIONS

TO-220AB



DIM.	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	-	10.50	-	0.413
B	2.62	3.44	0.103	0.135
C	2.80	4.20	0.110	0.165
D	0.68	0.94	0.027	0.037
E	3.54	4.00	0.139	0.157
F	14.60	16.00	0.575	0.630
G	13.19	14.79	0.519	0.582
H	2.41	2.67	0.095	0.105
I	4.42	4.76	0.174	0.187
J	1.14	1.40	0.045	0.055
K	5.84	6.86	0.230	0.270
L	2.20	2.80	0.087	0.110
M	0.35	0.64	0.014	0.025
N	1.14	1.77	0.045	0.070

MARKING DIAGRAM



P/N = Specific Device Code
G = Green Compound
YWW = Date Code
F = Factory Code

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