



8A, 200V - 600V Glass Passivated Super Fast Rectifiers

FEATURES

- Glass passivated chip junction
- High efficiency, Low VF
- High current capability
- High reliability
- High surge current capability
- Compliant to RoHS Directive 2011/65/EU and in accordance to WEEE 2002/96/EC
- Halogen-free according to IEC 61249-2-21



Case: TO-220AC

Molding compound: UL flammability classification rating 94V-0

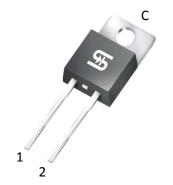
Part no. with suffix "H" means AEC-Q101 qualified

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:** 1.8 g (approximately)







TO-220AC



MAXIMUM RATINGS AND ELECTRICAL CHA	ΔΡΔCTFRI	STICS (T.=2)	5°C unless othe	erwise noted)	
PARAMETER	SYMBOL	MUR820	MUR840	MUR860	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)}	8			Α
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I _{FSM}	100		А	
Maximum instantaneous forward voltage (Note 1) I _F =8 A	V _F	0.975	1.30	1.70	V
Maximum reverse current @ rated V_R $T_J=25^{\circ}C$ $T_J=100^{\circ}C$	I _R	5 250		μA	
Maximum reverse recovery time (Note 2)	t _{rr}	25	25 50		ns
Typical thermal resistance	$R_{ heta JC}$	3 2		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=300 μ s, 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
MUR8x0 (Note 1)	Н	C0	G	TO-220AC	50 / Tube

Note 1: "x" defines voltage from 200V (MUR820) to 600V (MUR860)

^{*:} Optional available

EXAMPLE						
EXAMPLE P/N	PART NO.	PART NO. SUFFIX	PACKING CODE	PACKING CODE SUFFIX	DESCRIPTION	
MUR820HC0G	MUR820	Н	C0	G	AEC-Q101 qualified Green compound	

RATINGS AND CHARACTERISTICS CURVES

(T_A=25°C unless otherwise noted)



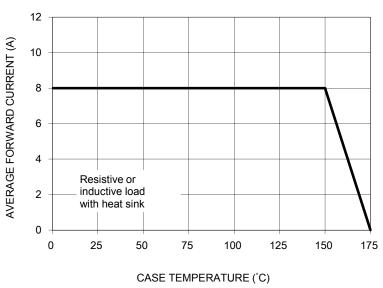


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

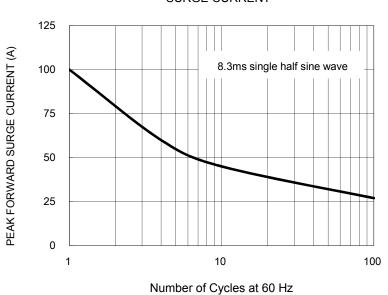


FIG. 3 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

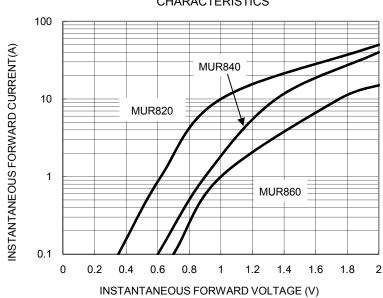
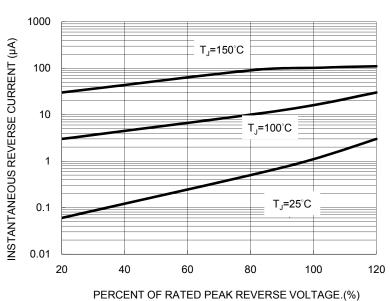


FIG. 4 TYPICAL REVERSE CHARACTERISTICS



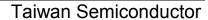




FIG. 5 TYPICAL JUNCTION CAPACITANCE

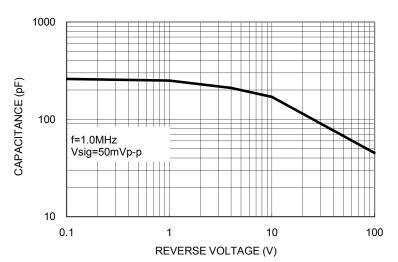
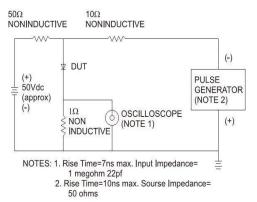
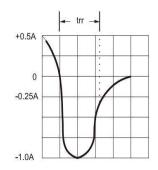


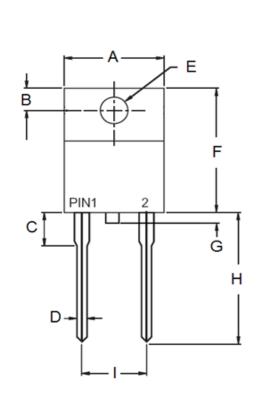
FIG.6 REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

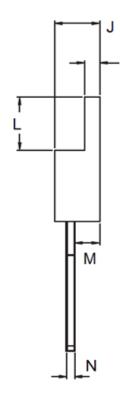




PACKAGE OUTLINE DIMENSIONS

TO-220AC





DIM.	Unit	(mm)	Unit (inch)		
	Min	Max	Min	Max	
Α	-	10.50	-	0.413	
В	2.62	3.44	0.103	0.135	
С	2.80	4.20	0.110	0.165	
D	0.68	0.94	0.027	0.037	
Е	3.54	4.00	0.139	0.157	
F	14.60	16.00	0.575	0.630	
G	0.00	1.60	0.000	0.063	
Н	13.19	14.79	0.519	0.582	
I	4.95	5.20	0.195	0.205	
J	4.42	4.76	0.174	0.187	
K	1.14	1.40	0.045	0.055	
L	5.84	6.86	0.230	0.270	
М	2.20	2.80	0.087	0.110	
N	0.35	0.64	0.014	0.025	

MARKING DIAGRAM



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



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