

# 8A, 600V Glass Passivated Low VF Super Fast Rectifier

#### **FEATURES**

- Low conduction loss for high efficiency
- Excellent high temperature stability
- High forward surge capability
- Compliant to RoHS Directive 2011/65/EU and in accordance to WEEE 2002/96/EC
- Halogen-free according to IEC 61249-2-21

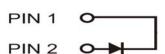
# 1 2





#### TYPICAL APPLICATIONS

MURF8L60 is especially suited as boost diode in discontinuous mode power factor correction or as a free wheeling diode in other power supply applications.



**ITO-220AC** 

#### MECHANICAL DATA

Case: ITO-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

Meets JESD 201 class 2 whisker test

Polarity: As marked

Mounting torque: 0.56 Nm maximum

Weight: 1.85g (approximately)

MAXIMUM RATINGS AND ELECTRICAL	_ CHARACTERISTIC	CS (T <sub>A</sub> =25°C unless otherwise noted)	
PARAMETER	SYMBOL	MURF8L60	UNIT
Maximum repetitive peak reverse voltage	$V_{RRM}$	600	V
Maximum RMS Voltage	V <sub>RMS</sub>	420	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	600	V
Maximum average forward rectified current	I <sub>F(AV)</sub>	8	A
Non-repetitive peak forward surge current 8.3ms single sine-wave	I <sub>FSM</sub>	100	А
Maximum instantaneous forward voltage (Note 1) $I_F$ = 8 A	V <sub>F</sub>	1.3	V
Maximum reverse current @ rated $V_R$ $T_J=25^{\circ}C$ $T_J=125^{\circ}C$	I <sub>R</sub>	5 200	μА
Maximum reverse recovery time $I_F$ =0.5A, $I_R$ =1A, $I_{RR}$ =0.25A	t <sub>rr</sub>	65	ns
Tunical the averal vaciation of	$R_{ heta JC}$	2.8	°C/M
Typical thermal resistance	$R_{\theta JA}$	10	°C/W
Operating junction temperature range	T <sub>J</sub>	- 55 to +175	°C
Storage temperature range	T <sub>STG</sub>	- 55 to +175	°C

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





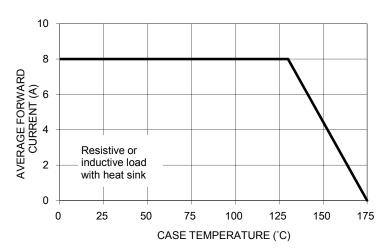
ORDERING INFORMATION					
PART NO.	PART NO. SUFFIX	PACKING CODE	PACKING CODE SUFFIX	PACKAGE	PACKING
MURF8L60	Н	C0	G	ITO-220AC	50 / Tube

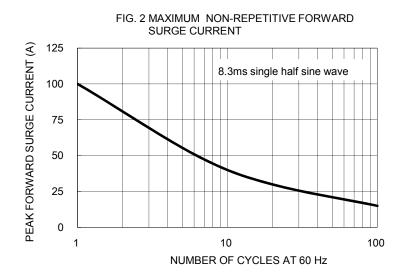
EXAMPLE					
EXAMPLE P/N	PART NO.	PART NO. SUFFIX	PACKING CODE	PACKING CODE SUFFIX	DESCRIPTION
MURF8L60HC0G	MURF8L60	н	C0	G	AEC-Q101 qualified Green compound

#### RATINGS AND CHARACTERISTICS CURVES

(T<sub>A</sub>=25°C unless otherwise noted)









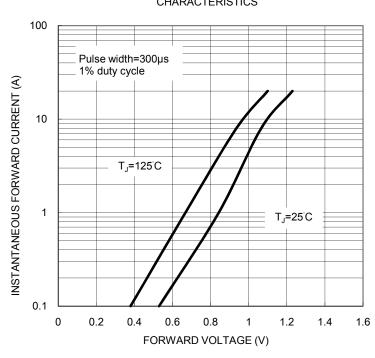


FIG. 4 TYPICAL REVERSE CHARACTERISTICS

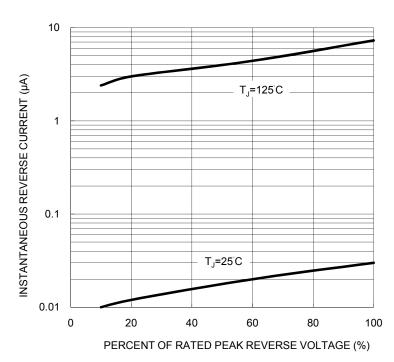
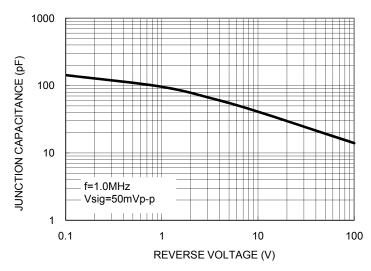


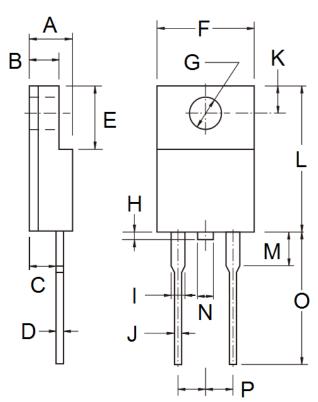


FIG. 5 TYPICAL JUNCTION CAPACITANCE



### PACKAGE OUTLINE DIMENSIONS

# **ITO-220AC**



DIM.	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
Α	4.30	4.70	0.169	0.185
В	2.50	3.10	0.098	0.122
С	2.30	2.90	0.091	0.114
D	0.46	0.76	0.018	0.030
Е	6.30	6.90	0.248	0.272
F	9.60	10.30	0.378	0.406
G	3.00	3.40	0.118	0.134
Н	0.00	1.60	0.000	0.063
I	0.95	1.45	0.037	0.057
J	0.50	0.90	0.020	0.035
K	2.40	3.20	0.094	0.126
L	14.80	15.50	0.583	0.610
М	-	4.10	-	0.161
N	-	1.80	-	0.071
0	12.60	13.80	0.496	0.543
Р	4.95	5.20	0.195	0.205

## MARKING DIAGRAM



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







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