

10A, 600V Glass Passivated Low VF High Efficient 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







TYPICAL APPLICATIONS

MURF10L60 is especially suited as boost diode in discontinuous mode power factor correction or as a free wheeling diode in other power supply applications.

MECHANICAL DATA

Case: ITO-220AC

Molding compound, UL flammability classification rating 94V-0 Packing code with suffix "G" means green compound (halogen-free) **Terminal:** Matte tin plated leads, solderable per JESD22-B102

Meets JESD 201 class 1A whisker test

Polarity: As marked

Mounting torque: 0.56 Nm maximum **Weight:** 1.85g (approximately)

PIN 1 O PIN 2 O DI

ITO-220AC

MAXIMUM RATINGS AND ELECTRICAL C	HARACTER	ISTICS (T _A =25°C unless otherwise noted)		
PARAMETER	SYMBOL	MURF10L60	UNIT	
Maximum repetitive peak reverse voltage	V _{RRM}	600	V	
Maximum RMS Voltage	V _{RMS}	420	V	
Maximum DC Blocking Voltage	V _{DC}	600	V	
Maximum average forward rectified current	I _{F(AV)}	10	А	
Non-repetitive peak forward surge current 8.3ms single sine-wave	I _{FSM}	100	А	
Maximum instantaneous forward voltage (Note 1) I_F = 10 A	V _F	1.3	V	
Maximum reverse current @ rated V_R $T_J=25^{\circ}C$ $T_J=125^{\circ}C$	I _R	5 200	μΑ	
Maximum reverse recovery time I_F =0.5A, I_R =1A, I_{RR} =0.25A	t _{rr}	65	ns	
Turning I the support resistance	$R_{ heta JC}$	3.5	°CAM	
Typical thermal resistance	$R_{\theta JA}$	10	°C/W	
Operating junction temperature range	TJ	- 55 to +150	°C	
Storage temperature range	T _{STG}	- 55 to +150	°C	

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



ORDERING INFORMATION				
PART NO.	PACKING CODE	PACKING CODE SUFFIX	PACKAGE	PACKING
MURF10L60	C0	G	ITO-220AC	50 / Tube

Note: Whole series with green compound

EXAMPLE					
EXAMPLE P/N	PART NO.	PACKING CODE	PACKING CODE SUFFIX	DESCRIPTION	
MURF10L60 C0G	MURF10L60	C0	G	Green compound	

RATINGS AND CHARACTERISTICS CURVES

(T_A=25°C unless otherwise noted)



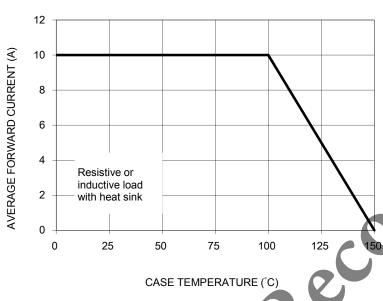
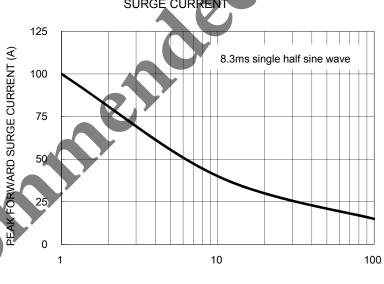


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT



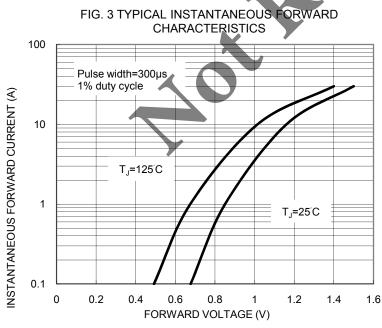


FIG. 4 TYPICAL REVERSE CHARACTERISTICS

NUMBER OF CYCLES AT 60 Hz

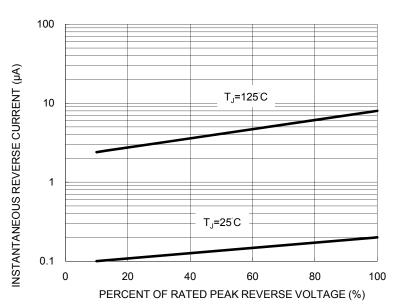
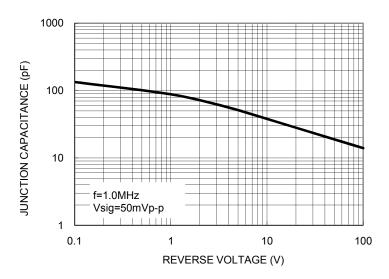


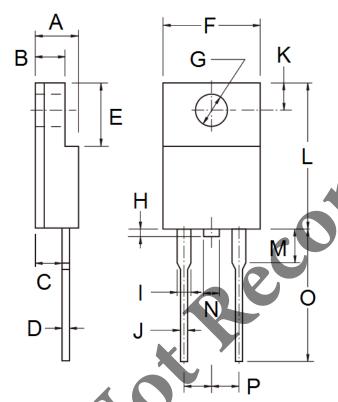


FIG. 5 TYPICAL JUNCTION CAPACITANCE



PACKAGE OUTLINE DIMENSIONS

ITO-220AC



DIM.	Unit	(mm)	Unit (inch)	
DIM.	Min	Max	Min	Max
Α	4.30	4.70	0.169	0.185
В	2.50	3.16	0.098	0.124
С	2.30	2.96	0.091	0.117
9	0.46	0.76	0.018	0.030
E	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	1	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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