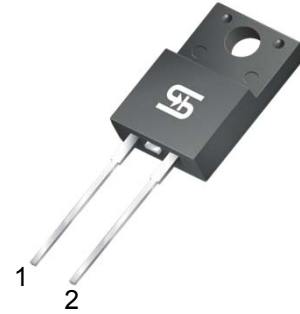


## 10A, 600V Glass Passivated Low VF High Efficient Rectifier

### FEATURES

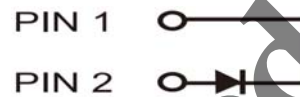
- Low conduction loss for high efficiency
- Excellent high temperature stability
- High forward surge capability
- Compliant to RoHS Directive 2011/65/EU and in accordance to WEEE 2002/96/EC
- Halogen-free according to IEC 61249-2-21



### 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.

ITO-220AC



### 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)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T <sub>A</sub> =25°C unless otherwise noted)			
PARAMETER	SYMBOL	MURF10L60	UNIT
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	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>	10	A
Non-repetitive peak forward surge current 8.3ms single sine-wave	I <sub>FSM</sub>	100	A
Maximum instantaneous forward voltage (Note 1) I <sub>F</sub> = 10 A	V <sub>F</sub>	1.3	V
Maximum reverse current @ rated V <sub>R</sub>	I <sub>R</sub>	T <sub>J</sub> =25°C	5
		T <sub>J</sub> =125°C	200
Maximum reverse recovery time I <sub>F</sub> =0.5A, I <sub>R</sub> =1A, I <sub>RR</sub> =0.25A	t <sub>rr</sub>	65	ns
Typical thermal resistance	R <sub>θJC</sub>	3.5	°C/W
	R <sub>θJA</sub>	10	
Operating junction temperature range	T <sub>J</sub>	- 55 to +150	°C
Storage temperature range	T <sub>STG</sub>	- 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**

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

FIG.1 FORWARD CURRENT DERATING CURVE

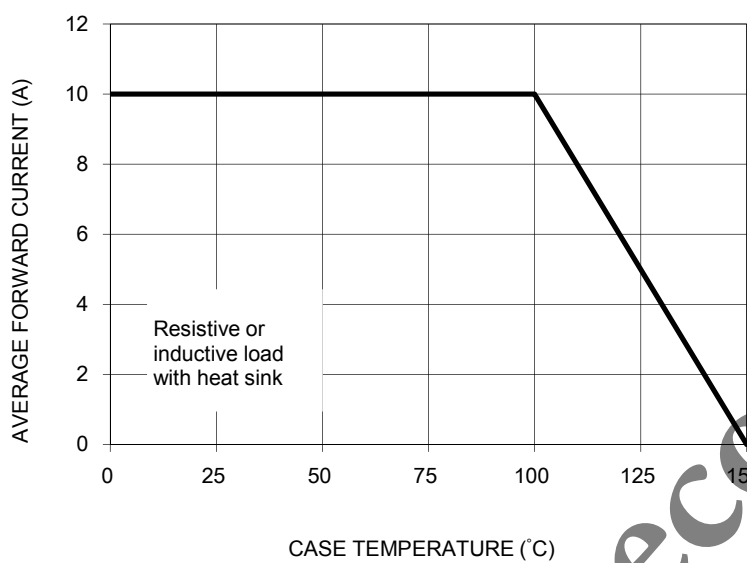


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

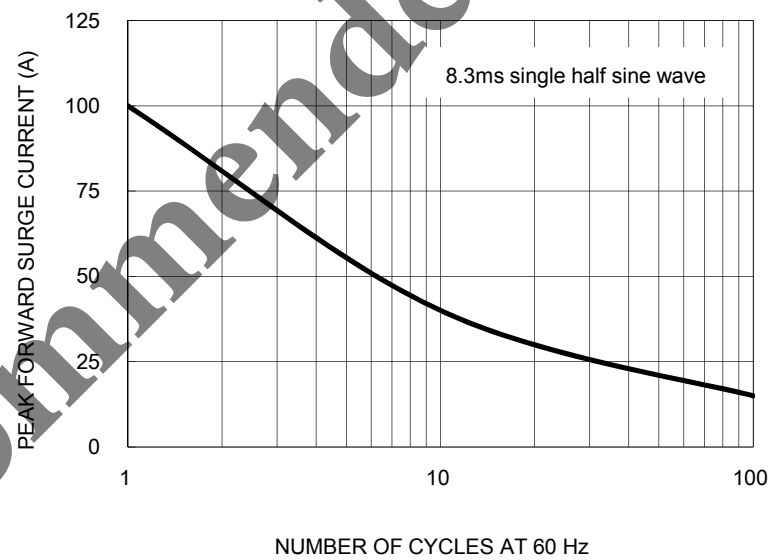


FIG. 3 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

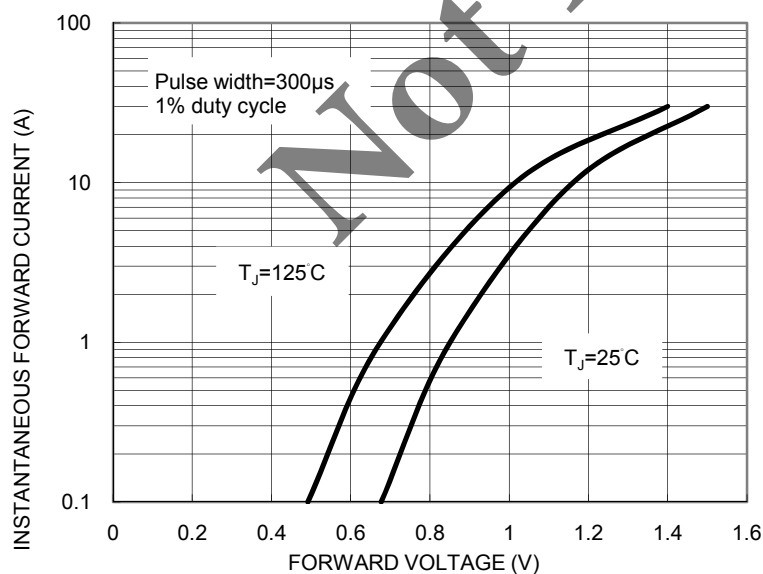


FIG. 4 TYPICAL REVERSE CHARACTERISTICS

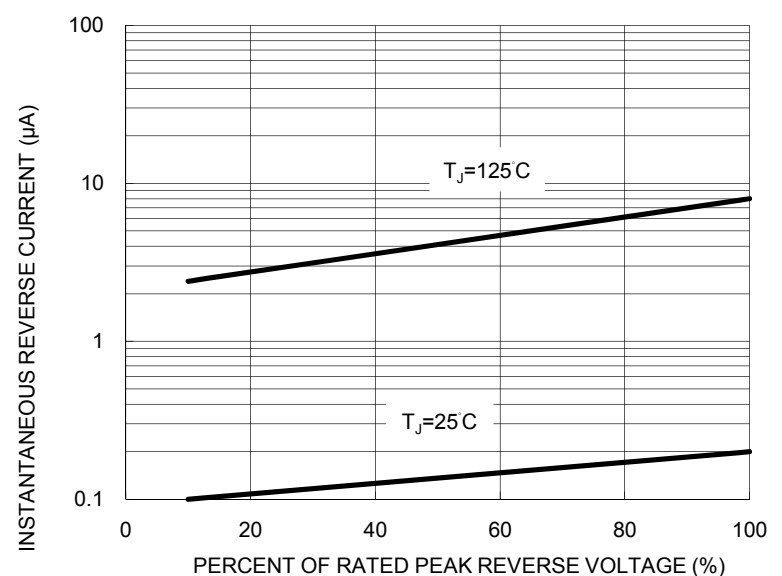
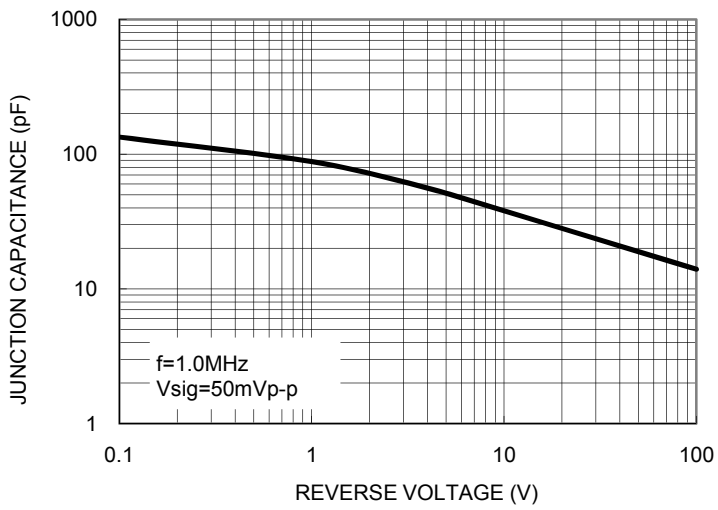
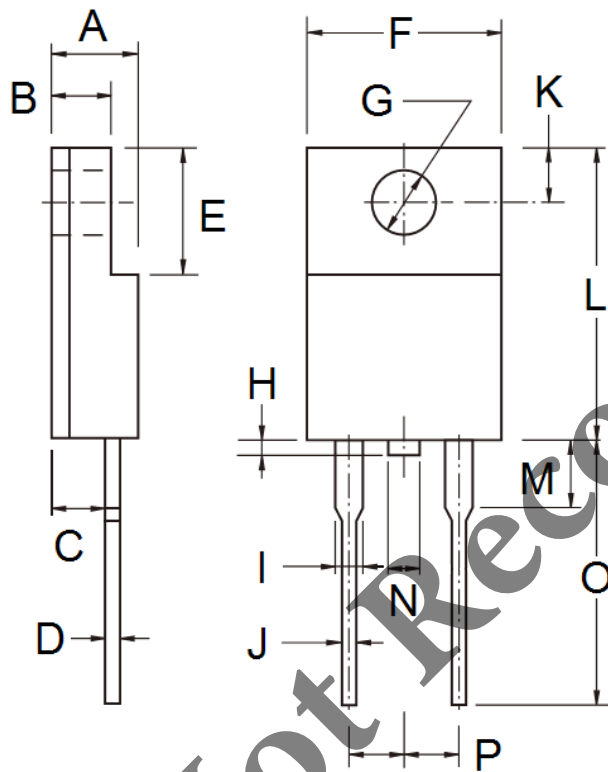


FIG. 5 TYPICAL JUNCTION CAPACITANCE



PACKAGE OUTLINE DIMENSIONS

ITO-220AC



DIM.	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	4.30	4.70	0.169	0.185
B	2.50	3.16	0.098	0.124
C	2.30	2.96	0.091	0.117
D	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
H	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
M	-	4.10	-	0.161
N	-	1.80	-	0.071
O	12.60	13.80	0.496	0.543
P	4.95	5.20	0.195	0.205

MARKING DIAGRAM



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

**Not Recommended**

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