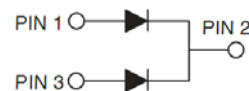


- High surge current capability
- Compliant to RoHS Directive 2011/65/EU and in accordance to WEEE 2002/96/EC
- Halogen-free according to IEC 61249-2-21 definition



### ITO-220AB



## MECHANICAL DATA

**Case :** ITO-220AB

Molding compound, UL flammability classification rating 94V-0  
 Base P/N with suffix "G" on packing code - halogen-free, RoHS compliant  
 Base P/N with prefix "H" on packing code - AEC-Q101 qualified

**Terminal :** Matte tin plated leads, solderable per JESD22-B102  
 Meet JESD 201 class 1A whisker test,  
 with prefix "H" on packing code meet JESD 201 class 2 whisker test

**Polarity :** As marked

**Mounting torque :** 5 in-lbs maximum

**Weight :** 1.7 gram (approximately)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C unless otherwise noted)

PARAMETER	SYMBOL	MBRF	MBRF	MBRF	MBRF	MBRF	MBRF
		1035 CT	1045 CT	1050 CT	1060 CT	1090 CT	10100 CT
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	35	45	50	60	90	100
Maximum RMS voltage	V <sub>RMS</sub>	24	31	35	42	63	70
Maximum DC blocking voltage	V <sub>DC</sub>	35	45	50	60	90	100
Maximum average forward rectified current	I <sub>F(AV)</sub>	10					
Peak Repetitive Forward Current (Rated VR, Square Wave, 20KHz)	I <sub>FRM</sub>	10					
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	120					
Peak Repetitive Reverse Surge Current (Note 1)	I <sub>RRM</sub>	0.5					
Maximum Instantaneous Forward Voltage (Note 2) IF= 5 A, TA=25°C IF= 5 A, TA=125°C IF= 10 A, TA=25°C IF= 10 A, TA=125°C	V <sub>F</sub>	0.70 0.57 0.80 0.67		0.80 0.65 0.90 0.75		0.85 0.75 0.95 0.85	
Maximum reverse current @ rated VR T <sub>A</sub> =25 °C T <sub>A</sub> =125 °C	I <sub>R</sub>	0.1					
		15		10			5
Voltage rate of change (Rated V <sub>R</sub> )	dV/dt	10000					
Typical thermal resistance	R <sub>θJC</sub>	3.5					
Operating junction temperature range	T <sub>J</sub>	- 55 to + 150					
Storage temperature range	T <sub>STG</sub>	- 55 to + 150					

Note 1 : t<sub>p</sub> = 2.0 μs, 1.0KHz

Note 2 : Pulse test with PW=300u sec, 1% duty cycle

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EXAMPLE					
PREFERRED P/N	PART NO.	AEC-Q101 QUALIFIED	PACKING CODE	GREEN COMPOUND	DES
MBRF1060CT C0	MBRF1060CT		C0		
MBRF1060CT C0G	MBRF1060CT		C0	G	Green c
MBRF1060CTHC0	MBRF1060CT	H	C0		AEC-Q1

## RATINGS AND CHARACTERISTICS CURVES

(TA=25°C unless otherwise noted)

FIG. 1 FORWARD CURRENT DERATING CURVE

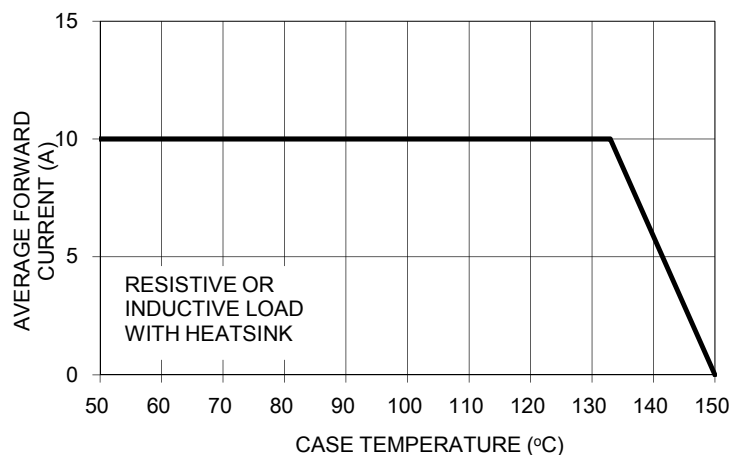


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

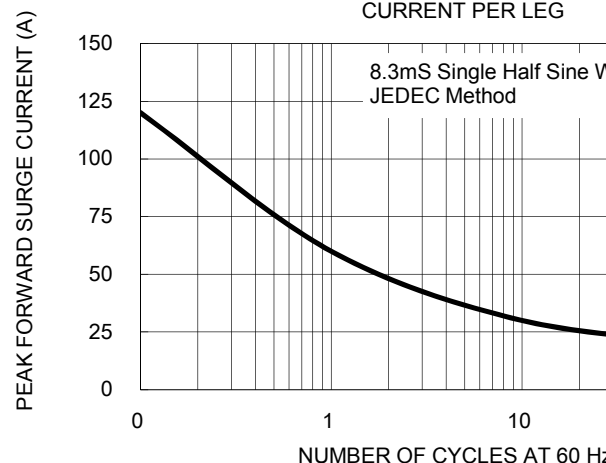


FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

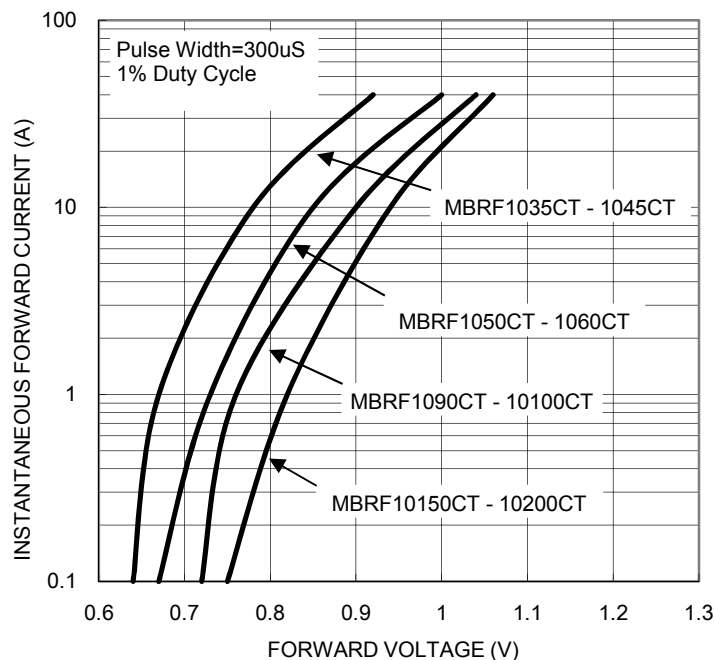
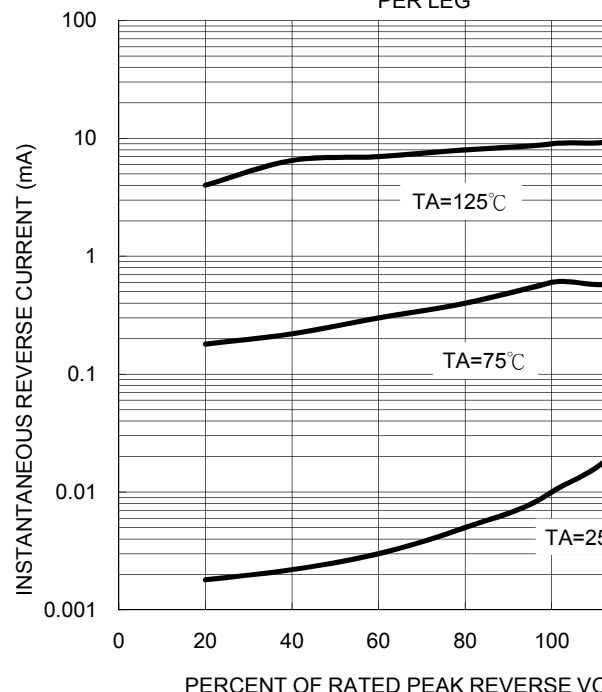
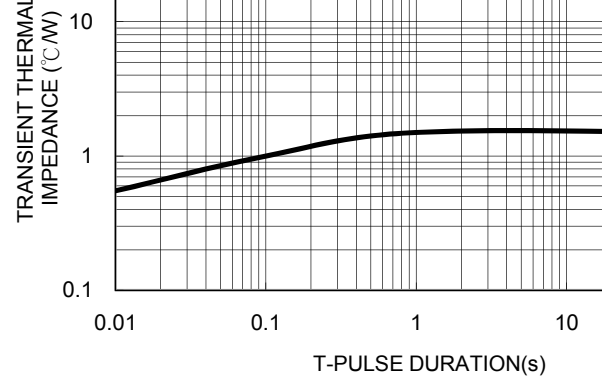
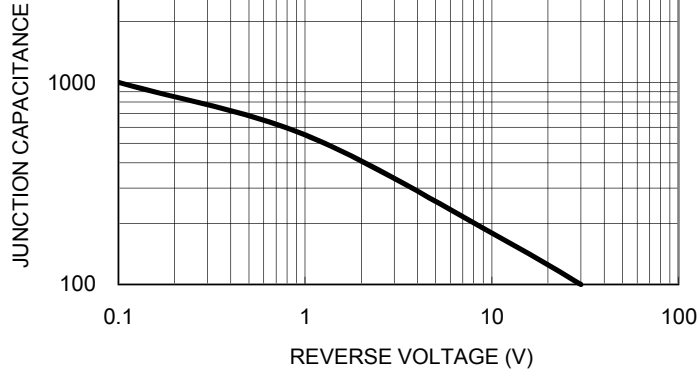
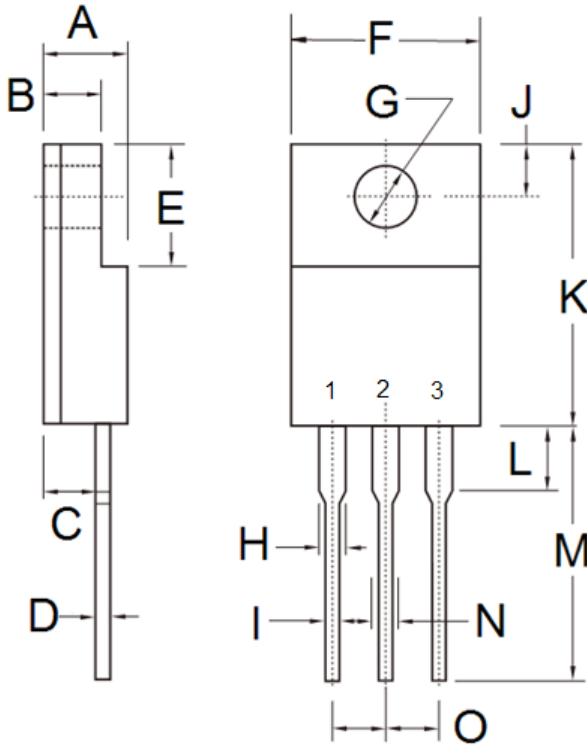


FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG





### PACKAGE OUTLINE DIMENSIONS



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	0.95	1.45	0.037	0.057
I	0.50	0.90	0.020	0.035
J	2.40	3.20	0.094	0.126
K	14.80	15.50	0.583	0.610
L	-	4.10	-	0.161
M	12.60	13.80	0.496	0.543
N	-	1.80	-	0.071
O	2.41	2.67	0.095	0.105

### MARKING DIAGRAM



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