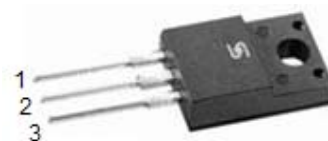


Dual Common Cathode Schottky Rectifier

FEATURES

- UL Recognized File # E-326243
- Low power loss, high efficiency
- Guardring for overvoltage protection
- 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 _A =25°C unless otherwise noted)						
PARAMETER	SYMBOL	MBRF20L100CT		MBRF20L120CT		UNIT
Maximum repetitive peak reverse voltage	V _{RRM}	100		120		V
Maximum RMS voltage	V _{RMS}	70		84		V
Maximum DC blocking voltage	V _{DC}	100		120		V
Maximum average forward rectified current	I _{F(AV)}	20				A
Peak Repetitive Forward Current (Rated VR, Square Wave, 20KHz)	I _{FRM}	20				A
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I _{FSM}	150				A
Peak Repetitive Reverse Surge Current (Note 1)	I _{RRM}	1				A
Maximum Instantaneous Forward Voltage (Note 2) IF= 10 A, TA=25°C IF= 10 A, TA=125°C IF= 20 A, TA=25°C IF= 20 A, TA=125°C	V _F	TYP	MAX	TYP	MAX	V
		0.72	0.75	0.78	0.83	
		0.58	0.68	0.63	0.72	
		0.81	0.85	0.86	0.9	
		0.67	0.75	0.73	0.8	
Maximum reverse current @ rated VR T _A =25 °C T _A =125 °C	I _R	TYP	MAX	TYP	MAX	uA mA
		1.1	20	1	20	
		1.2	15	1.4	10	
Voltage rate of change (Rated V _R)	dV/dt	10000				V/us
Typical thermal resistance	R _{θJC}	5.5		5		°C/W
Operating junction temperature range	T _J	- 55 to + 150				°C
Storage temperature range	T _{STG}	- 55 to + 150				°C

Note 1 : tp = 2.0 μs, 1.0KHz

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

ORDERING INFORMATION					
PART NO.	AEC-Q101 QUALIFIED	PACKING CODE	GREEN COMPOUND CODE	PACKAGE	PACKING
MBRF20L1xxCT (Note 1)	Prefix "H"	C0	Suffix "G"	ITO-220AB	50 / Tube

Note 1: "xx" defines voltage from 100V (MBRF20L100CT) to 120V (MBRF20L120CT)

EXAMPLE					
PREFERRED P/N	PART NO.	AEC-Q101 QUALIFIED	PACKING CODE	GREEN COMPOUND CODE	DESCRIPTION
MBRF20L100CT C0	MBRF20L100CT		C0		
MBRF20L100CT C0G	MBRF20L100CT		C0	G	Green compound
MBRF20L100CTHC0	MBRF20L100CT	H	C0		AEC-Q101 qualified

RATINGS AND CHARACTERISTICS CURVES

(TA=25°C unless otherwise noted)

FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

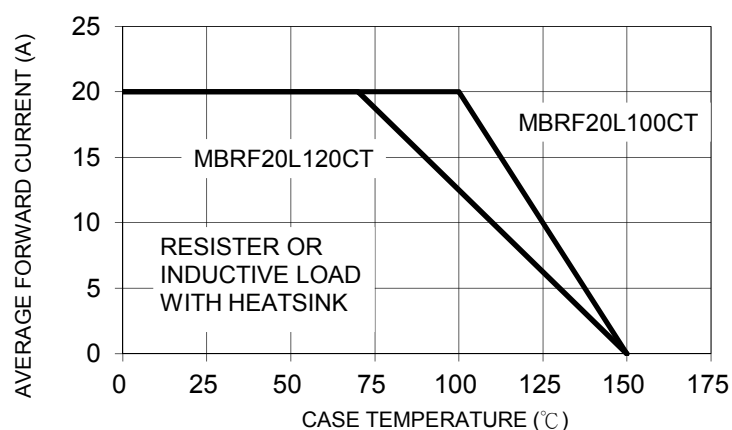


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

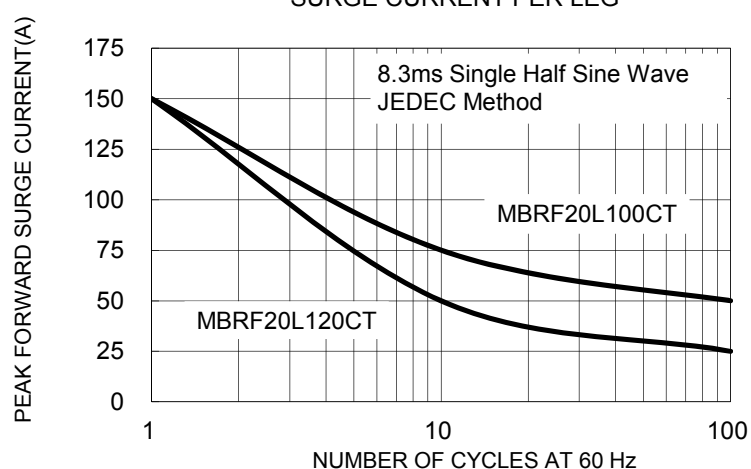


FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

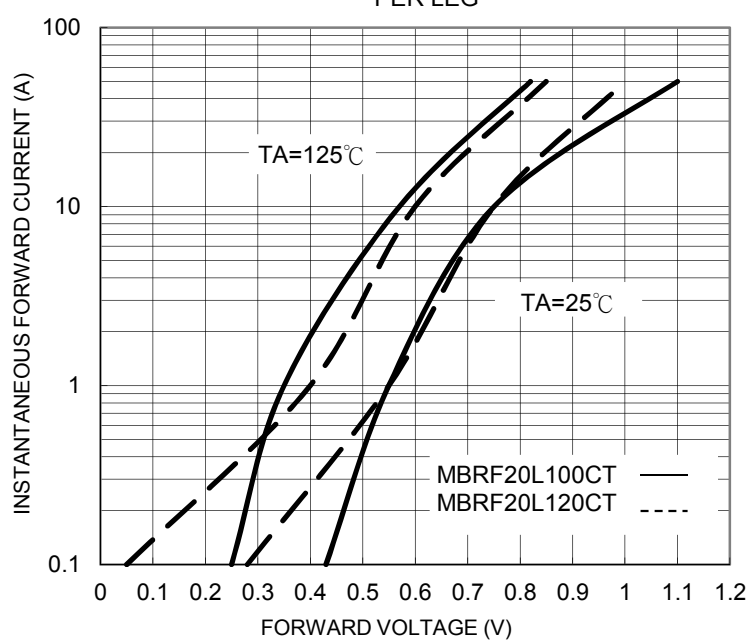


FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG

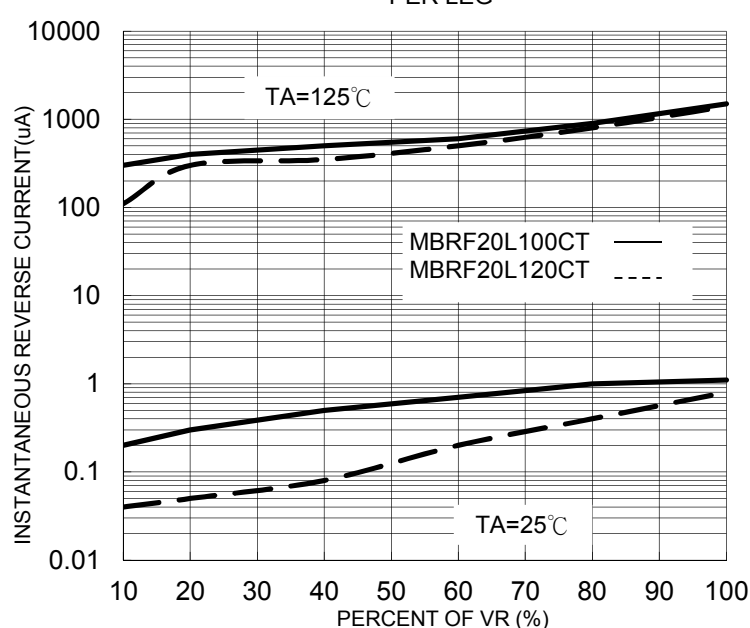


FIG. 5 TYPICAL JUNCTION CAPACITANCE PER LEG

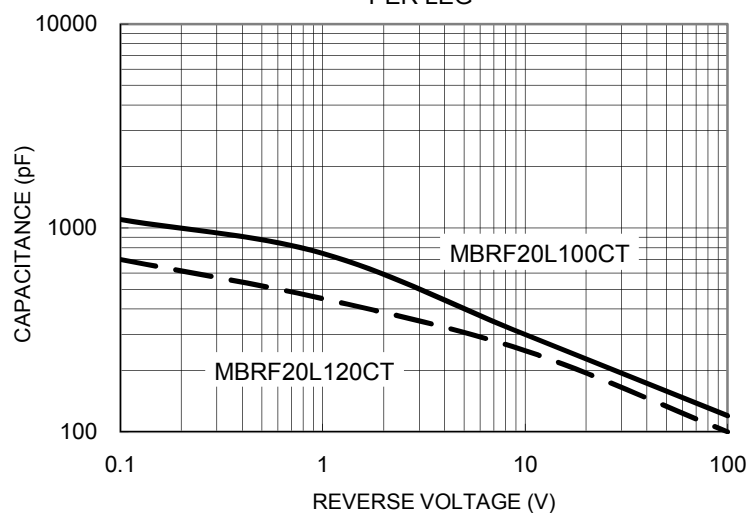
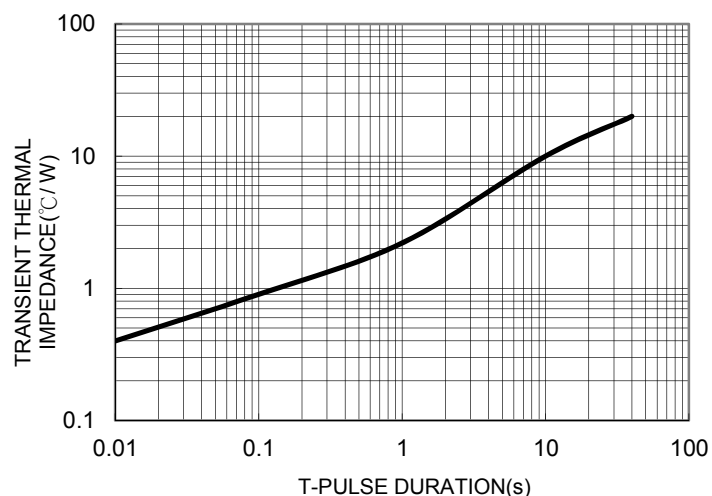
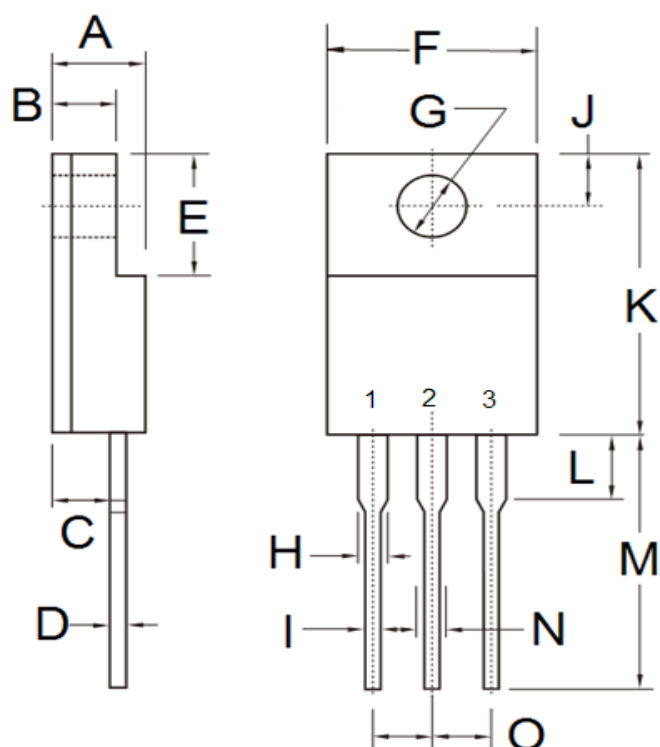


FIG. 6 TYPICAL TRANSIENT THERMAL IMPEDANCE PER LEG



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