

Dual Common Cathode Schottky Rectifier

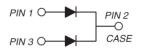
FEATURES

- 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





TO-220AB





MECHANICAL DATA

Case: TO-220AB

Molding compound, UL flammability classification rating 94V-0 Base P/N with suffix "G" on packing code - halogen-free 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:** 1.8 g (approximately)

MAXIMUM RATINGS AND ELECTRICAL	CHARACTE	RISTICS (T _A =	25℃ unless oth	erwise noted)	
PARAMETER	SYMBOL	MBR	MBR	MBR	UNIT
PARAMETER	SYMBOL	20H100CT	20H150CT	20H200CT	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	100	150	200	V
Maximum RMS voltage	V_{RMS}	70	105	140	V
Maximum DC blocking voltage	V_{DC}	100	150	200	V
Maximum average forward rectified current	I _{F(AV)}	20			Α
Peak repetitive forward current (Rated VR, Square Wave, 20KHz)	I _{FRM}	20			А
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I _{FSM}	150			А
Peak repetitive reverse surge current (Note 1)	I _{RRM}	1.0 0.5		0.5	Α
Maximum instantaneous forward voltage (Note 2) I_F = 10A, T_J =25 $^{\circ}$ C I_F = 10A, T_J =125 $^{\circ}$ C I_F = 20A, T_J =25 $^{\circ}$ C I_F = 20A, T_J =125 $^{\circ}$ C	V _F	0.85 0.75 0.95 0.85	0.88 0.75 0.97 0.85		٧
Maximum reverse current @ rated VR T_J =25 $^{\circ}$ C T_J =125 $^{\circ}$ C	L _R	5 2		μA mA	
Voltage rate of change (Rated V _R)	dV/dt	10000		V/µs	
Typical thermal resistance	$R_{ heta JC}$	1.5		°C/W	
Operating junction temperature range	T _J	- 55 to +175		оС	
Storage temperature range	T _{STG}	- 55 to +175		οС	

Note 1: $tp = 2.0 \mu s$, 1.0KHz

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



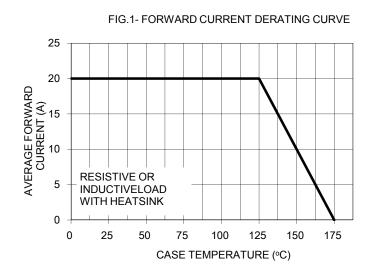
ORDERING INFORMATION					
PART NO.	AEC-Q101	PACKING CODE	GREEN COMPOUND	PACKAGE	PACKING
	QUALIFIED	THORING GODE	CODE		
MBR20HxxxCT (Note)	Prefix "H"	C0	Suffix "G"	TO-220AB	50 / Tube

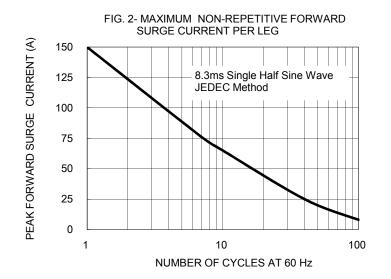
Note 1: "xxx" defines voltage from 100V (MBR20H100CT) to 200V (MBR20H200CT)

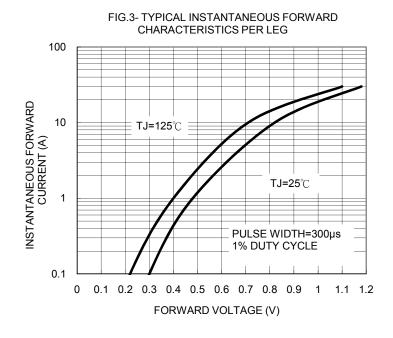
EXAMPLE						
PREFERRED P/N	PART NO.	AEC-Q101 OUALIFIED	PACKING CODE	GREEN COMPOUND CODE	DESCRIPTION	
MBR20H100CT C0	MBR20H100CT	QUALITED	C0	COBE		
MBR20H100CT C0G	MBR20H100CT		C0	G	Green compound	
MBR20H100CTHC0	MBR20H100CT	Н	C0		AEC-Q101 qualified	

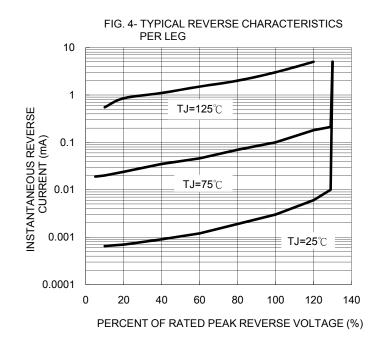
RATINGS AND CHARACTERISTICS CURVES

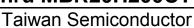
(TA=25°C unless otherwise noted)



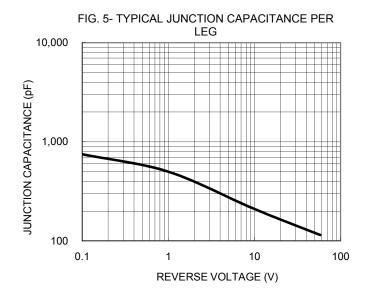


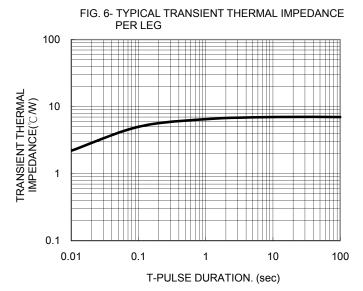




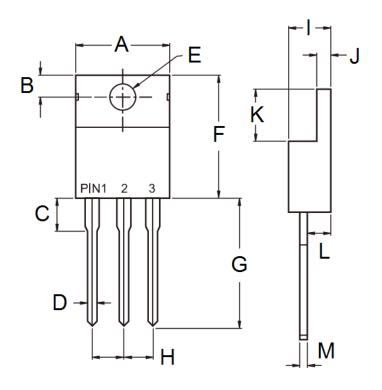








PACKAGE OUTLINE DIMENSIONS



DIM.	Unit	(mm)	Unit (inch)		
DIIVI.	Min	Max	Min	Max	
Α	-	10.50	-	0.413	
В	2.62	3.44	0.103	0.135	
С	2.80	4.20	0.110	0.165	
D	0.68	0.94	0.027	0.037	
Е	3.54	4.00	0.139	0.157	
F	14.60	16.00	0.575	0.630	
G	13.19	14.79	0.519	0.582	
Н	2.41	2.67	0.095	0.105	
I	4.42	4.76	0.174	0.187	
J	1.14	1.40	0.045	0.055	
K	5.84	6.86	0.230	0.270	
L	2.20	2.80	0.087	0.110	
М	0.35	0.64	0.014	0.025	

MARKING DIAGRAM



P/N = Specific Device Code G = Green Compound

YWW = Date Code F = Factory Code

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