



## 25A, 35V - 150V Dual Common Cathode Schottky Rectifiers

#### **FEATURES**

- Low power loss, high efficiency
- Guardring for overvoltage protection
- High surge current capability
- UL Recognized File # E-326243
- Compliant to RoHS Directive 2011/65/EU and in accordance to WEEE 2002/96/EC
- Halogen-free according to IEC 61249-2-21







#### **MECHANICAL DATA**

Case: ITO-220AB

Molding compound, UL flammability classification rating 94V-0

Part no. with suffix "H" means AEC-Q101 qualified

Packing code with suffix "G" means green compound (halogen-free) **Terminal:** Matte tin plated leads, solderable per JESD22-B102

Meet JESD 201 class 2 whisker test

Polarity: As marked

**Mounting torque:** 5 in-lbs maximum **Weight:** 1.7 g (approximately)

PIN 1 O	PIN 2
PIN 3O	

**ITO-220AB** 

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T <sub>A</sub> =25°C unless otherwise noted)									
		MBRF	MBRF	MBRF	MBRF	MBRF	MBRF	MBRF	
PARAMETER	SYMBOL	2535	2545	2550	2560	2590	25100	25150	UNIT
		СТ	СТ	СТ	СТ	СТ	СТ	СТ	
Maximum repetitive peak reverse voltage	$V_{RRM}$	35	45	50	60	90	100	150	V
Maximum RMS voltage	$V_{RMS}$	24	31	35	42	63	70	105	V
Maximum DC blocking voltage	$V_{DC}$	35	45	50	60	90	100	150	V
Maximum average forward rectified current	I <sub>F(AV)</sub>	25							Α
Peak repetitive forward current (Rated V <sub>R</sub> , Square wave, 20KHz)	I <sub>FRM</sub>	25						Α	
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	200			Α				
Maximum instantaneous forward voltage (Note 1) $I_F$ =12.5A, $T_J$ =25°C	V <sub>F</sub>		-	0.	75	0.	85	0.95	
I <sub>F</sub> =12.5A, T <sub>J</sub> =125°C		- 0.82		0.	65	5 0.		0.92	V
I <sub>F</sub> =25A, T <sub>J</sub> =25°C					- 0.		92	1.02	
I <sub>F</sub> =25A, T <sub>J</sub> =125°C		0.	73		_	0.	88	0.98	
T <sub>J</sub> =25°C		2			0.1			_	
Maximum reverse current @ rated V <sub>R</sub> T <sub>J</sub> =125°C	I <sub>R</sub>	1	5	1	0	7	.5	5	mA
Voltage rate of change (Rated V <sub>R</sub> )	dV/dt	10000			V/µs				
Typical thermal resistance	$R_{ heta JC} \ R_{ heta JA}$	1 8			°C/W				
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

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ORDERING INFORMATION							
PART NO.	PART NO. SUFFIX	PACKING CODE	PACKING CODE SUFFIX <sup>(*)</sup>	PACKAGE	PACKING		
MBRF25xxCT (Note 1)	Н	C0	G	ITO-220AB	50 / Tube		

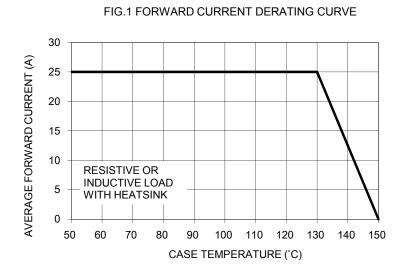
Note 1: "xx" defines voltage from 35V (MBRF2535CT) to 150V (MBRF25150CT)

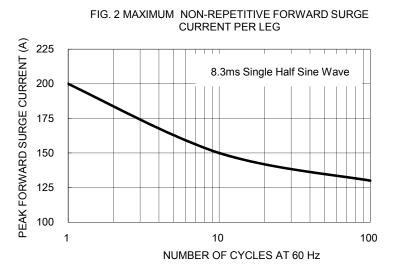
<sup>\*:</sup> Optional available

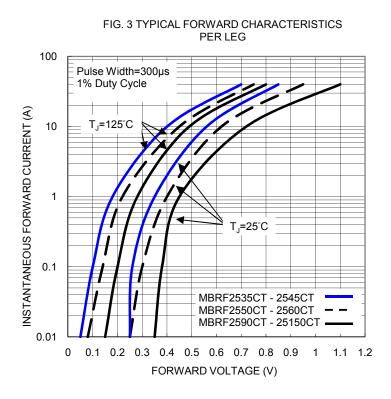
EXAMPLE								
PREFERRED P/N	PART NO.	PART NO. SUFFIX	PACKING CODE	PACKING CODE SUFFIX	DESCRIPTION			
MBRF2560CTHC0G	MBRF2560CT	П	C0	G	AEC-Q101 qualified Green compound			

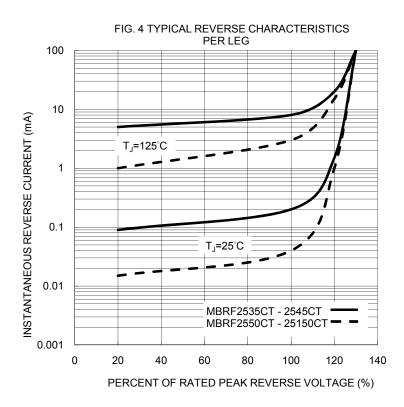
#### **RATINGS AND CHARACTERISTICS CURVES**

(T<sub>A</sub>=25°C unless otherwise noted)









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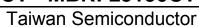
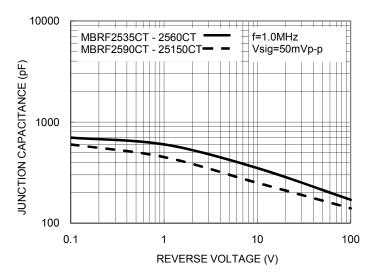
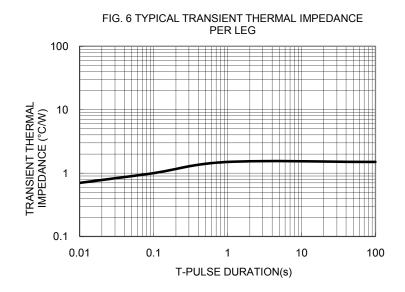


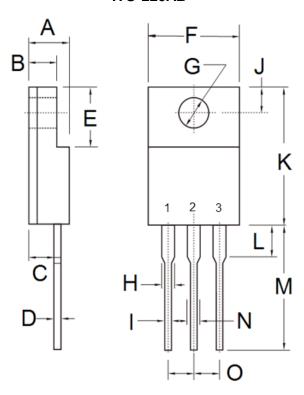


FIG. 5 TYPICAL JUNCTION CAPACITANCE PER LEG





# PACKAGE OUTLINE DIMENSIONS ITO-220AB



DIM.	Unit	(mm)	Unit (inch)		
DIIVI.	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	
D	0.46	0.76	0.018	0.030	
Е	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	0.95	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	
М	12.60	13.80	0.496	0.543	
N	-	1.80	-	0.071	
0	2.41	2.67	0.095	0.105	

### **MARKING DIAGRAM**



P/N = Specific Device Code G = Green Compound

YWW = Date Code F = Factory Code

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