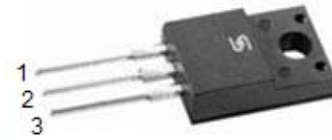


## Dual Common Cathode Schottky Rectifier

### 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 definition



### MECHANICAL DATA

**Case:** ITO-220AB

Molding compound, UL flammability classification rating 94V-0

Base P/N with suffix "G" on packing code - halogen-free

**Terminal:** Matte tin plated leads, solderable per JESD22-B102

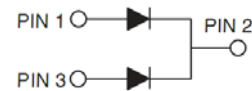
Meet JESD 201 class 1A whisker test

**Polarity:** As marked

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

**Weight:** 1.7 g (approximately)

### ITO-220AB



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T <sub>A</sub> =25°C unless otherwise noted)										
PARAMETER	SYMBOL	MBRF 2535 CT	MBRF 2545 CT	MBRF 2550 CT	MBRF 2560 CT	MBRF 2590 CT	MBRF 25100 CT	MBRF 25150 CT	UNIT	
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	35	45	50	60	90	100	150	V	
Maximum RMS voltage	V <sub>RMS</sub>	24	31	35	42	63	70	105	V	
Maximum DC blocking voltage	V <sub>DC</sub>	35	45	50	60	90	100	150	V	
Maximum average forward rectified current	I <sub>F(AV)</sub>	25							A	
Peak repetitive forward current (Rated VR, Square wave, 20KHz)	I <sub>FRM</sub>	25							A	
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	200							A	
Maximum instantaneous forward voltage (Note 1) I <sub>F</sub> =12.5A, T <sub>J</sub> =25°C I <sub>F</sub> =12.5A, T <sub>J</sub> =125°C I <sub>F</sub> =25A, T <sub>J</sub> =25°C I <sub>F</sub> =25A, T <sub>J</sub> =125°C	V <sub>F</sub>	- - 0.82 0.73	- - - -	0.75 0.65 - -	- - - -	0.85 0.75 0.92 0.88	- - - -	0.95 0.92 1.02 0.98	V	
Maximum reverse current @ rated VR T <sub>J</sub> =25 °C T <sub>J</sub> =125 °C	I <sub>R</sub>	2			0.1		15		5	mA
Voltage rate of change (Rated V <sub>R</sub> )	dV/dt	10000							V/μs	
Typical thermal resistance	R <sub>θJC</sub> R <sub>θJA</sub>	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

ORDERING INFORMATION				
PART NO.	PACKING CODE	GREEN COMPOUND CODE	PACKAGE	PACKING
MBRF25xxCT (Note 1)	C0	Suffix "G"	ITO-220AB	50 / Tube

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

EXAMPLE				
PREFERRED P/N	PART NO.	PACKING CODE	GREEN COMPOUND CODE	DESCRIPTION
MBRF2560CT C0	MBRF2560CT	C0		
MBRF2560CT C0G	MBRF2560CT	C0	G	Green compound

## RATINGS AND CHARACTERISTICS CURVES

(TA=25°C unless otherwise noted)

FIG.1 FORWARD CURRENT DERATING CURVE

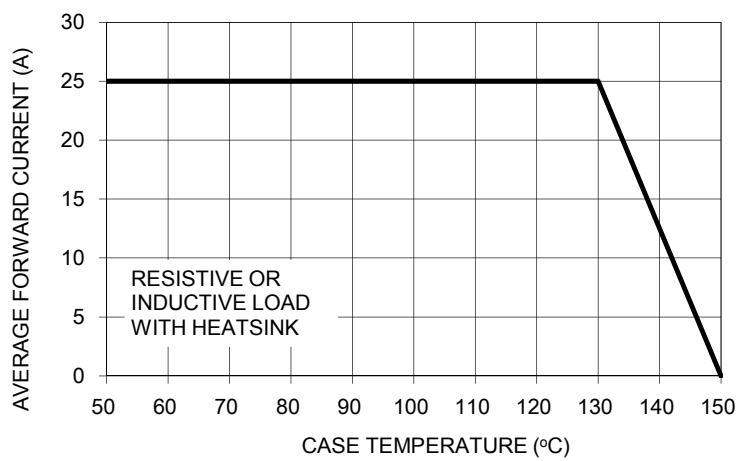


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

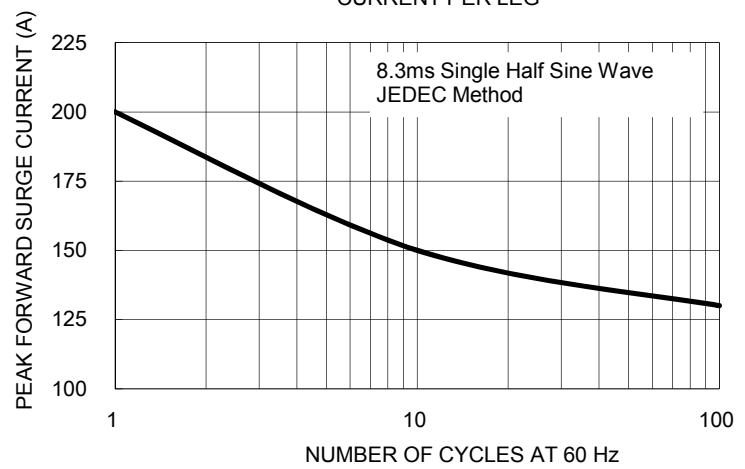


FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

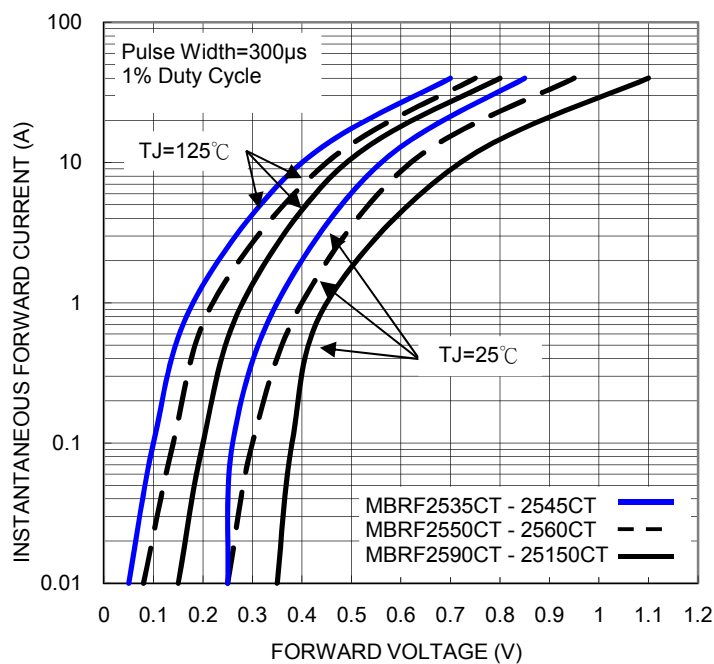


FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG

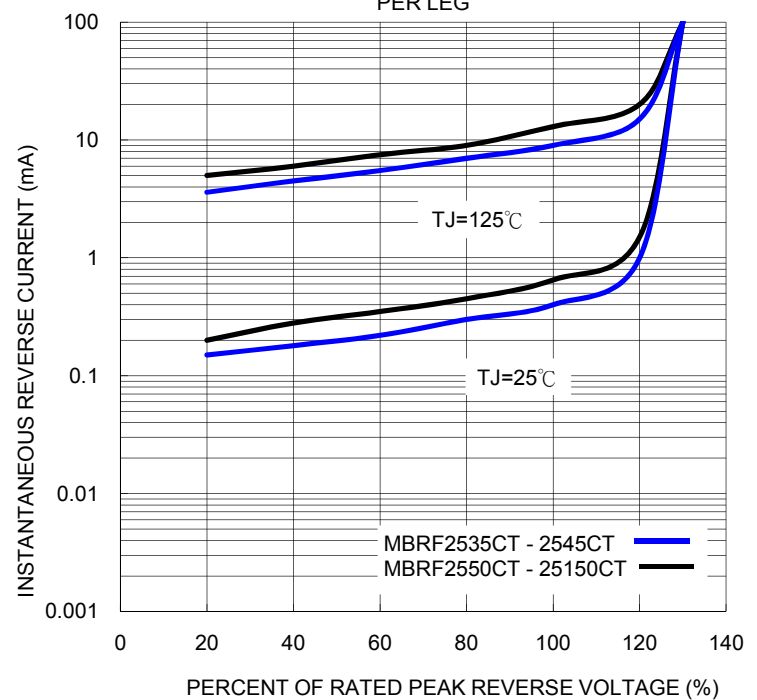


FIG. 5 TYPICAL JUNCTION CAPACITANCE PER LEG

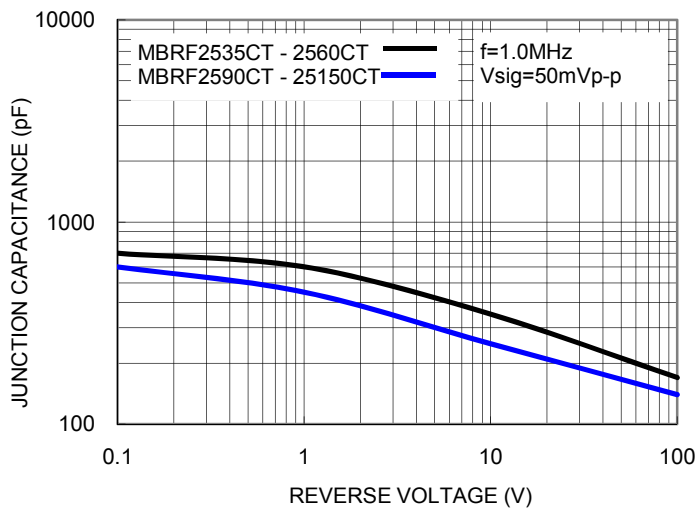
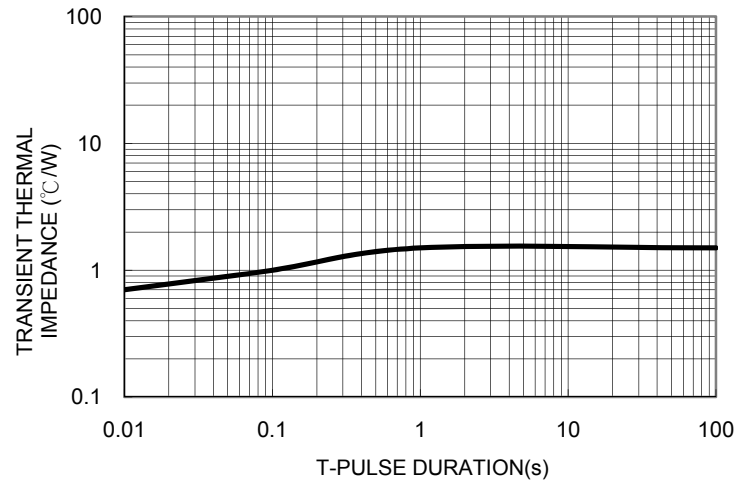
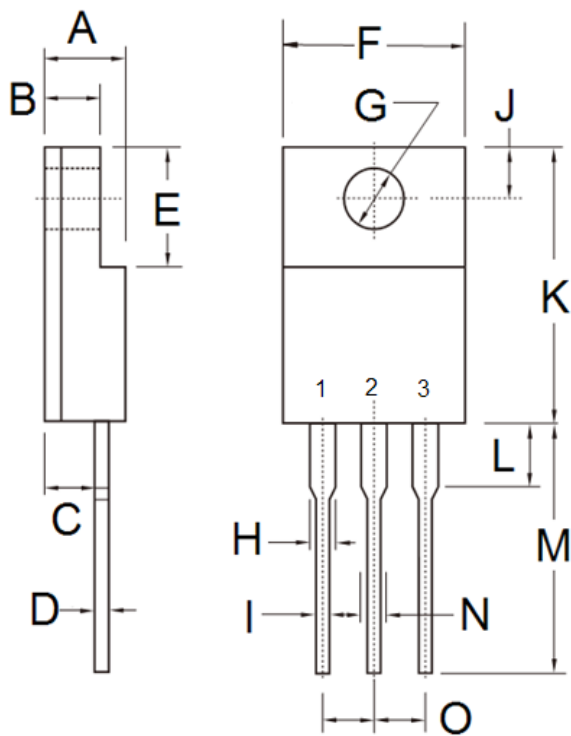


FIG. 6 TYPICAL TRANSIENT THERMAL IMPEDANCE PER LEG



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

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