

Features

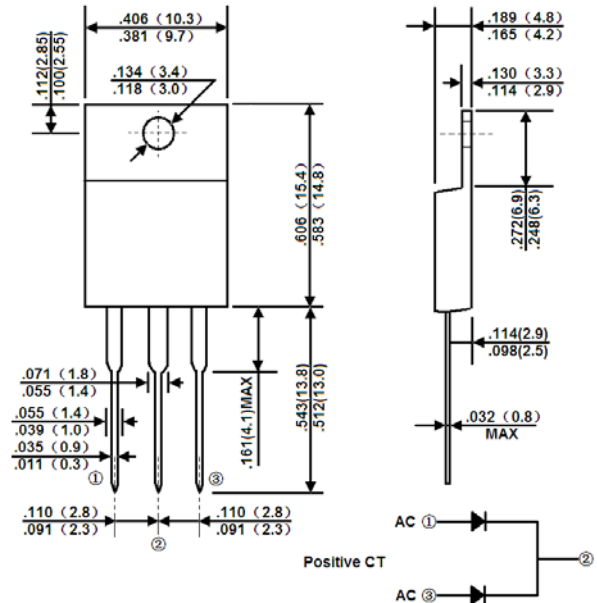
- * Low power loss, high efficiency
- * Guard-ring for overvoltage protection
- * High surge current capability
- * Compliant to RoHS Directive 2011/65/EU and in accordance to WEEE 2002/96/EC



RoHS
COMPLIANT

Package Outline Dimensions in inches (millimeters)

ITO-220AB:



Mechanical Data

- * Case: ITO-220AB Molded plastic
- * Molding compound, UL flammability classification rating 94V-0
- * 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

Maximum Ratings and Electrical Characteristics

Rating at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Type Number	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_{RRM}	35	45	50	60	90	100	150	V
Maximum RMS Voltage	V_{RMS}	24	31	35	42	63	70	105	V
Maximum D.C Blocking Voltage	V_{DC}	35	45	50	60	90	100	150	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	25							A
Peak Repetitive Forward Current (Rated VR, Square Wave, 20KHz)	I_{FRM}	25							A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I_{FSM}	200							A
Maximum Instantaneous Forward Voltage (Note 1) IF= 12.5 A, T _J =25°C IF= 12.5 A, T _J =125°C IF= 25 A, T _J =25°C IF= 25 A, T _J =125°C	V_F	- - 0.82 0.73	- 0.65 - -	0.75 - -	0.85 0.75 0.92 0.88	0.95 0.92 1.02 0.98			V
Maximum reverse current @ rated VR T _J =25 °C T _J =125 °C	I_R	0.2			0.1				mA
		15	10	7.5	5				
Voltage rate of change (Rated VR)	dV/dt	10000							V/μs
Typical Thermal Resistance	$R_{\theta jc}$ $R_{\theta ja}$	1 8							°C/W
Operating and Storage Temperature Range	T _J /T _{STG}	-55 to +150							°C

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

Ratings and Characteristic Curves

FIG. 1 FORWARD CURRENT DERATING CURVE

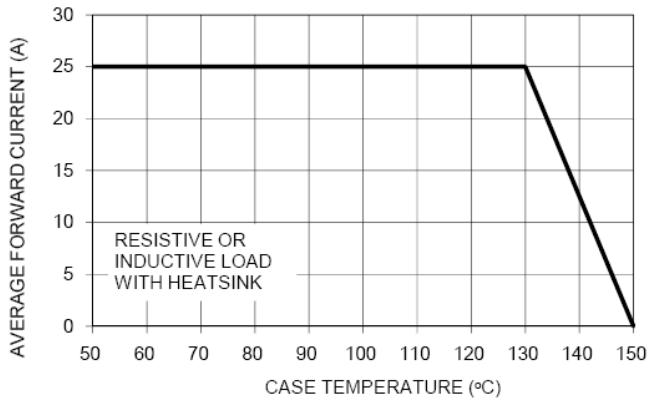


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

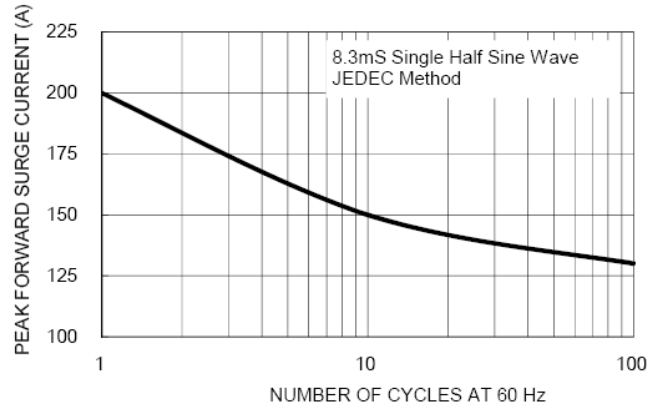


FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

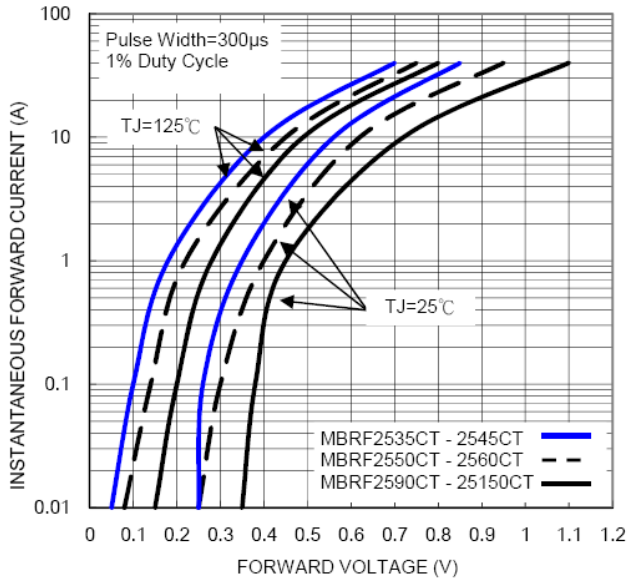


FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG

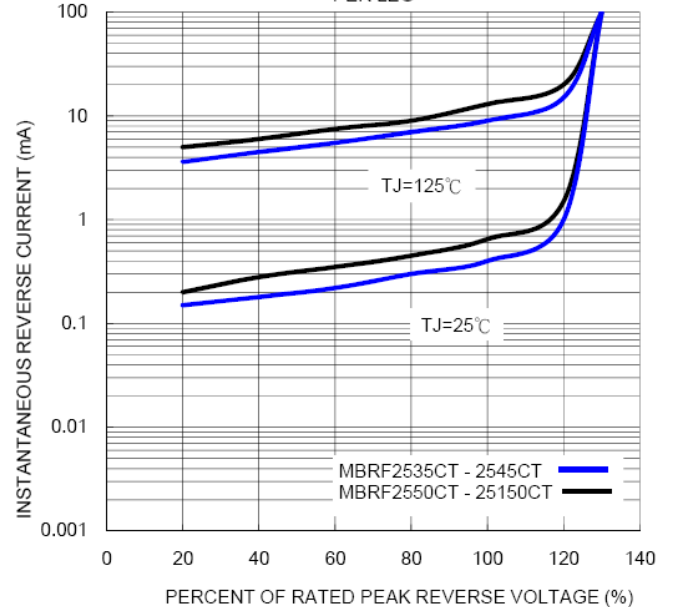


FIG. 5 TYPICAL JUNCTION CAPACITANCE PER LEG

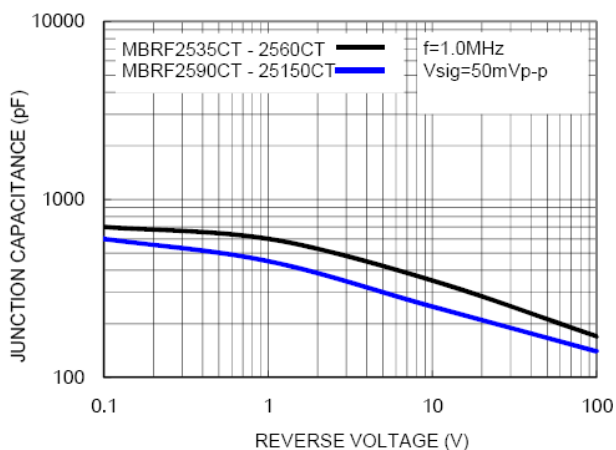
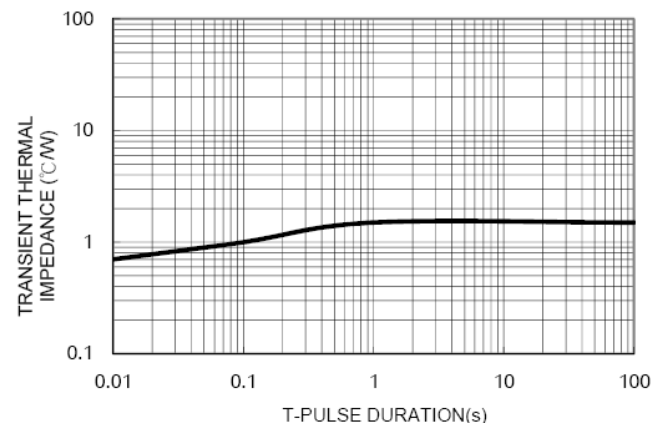


FIG. 6 TYPICAL TRANSIENT THERMAL IMPEDANCE PER LEG





MBRF2535CT THRU MBRF25150CT

Dual Common Cathode Schottky Rectifiers

Ordering Information

Part No.	Package	Packing
MBRF2535CT~MBRF25150CT	ITO-220AB	50pcs/Tube