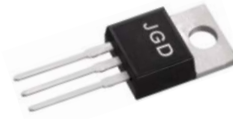


Features

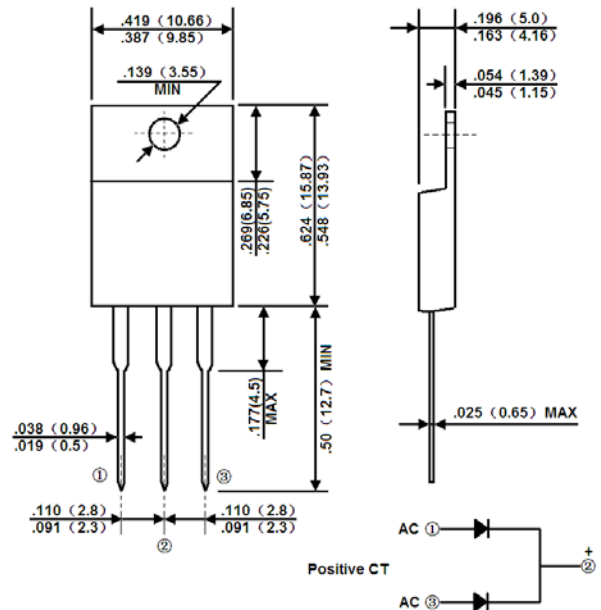
- * Low power loss, high efficiency
- * Guard-ring for overvoltage protection
- * High surge current capability
- * Compliant to RoHS Directive 2011/65/EU and in accordance to WEEE 2002/96/EC



RoHS
COMPLIANT

Package Outline Dimensions in inches (millimeters)

TO-220AB:



Mechanical Data

- * Cases: TO-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	MBR 2535 CT	MBR 2545 CT	MBR 2550 CT	MBR 2560 CT	MBR 2590 CT	MBR 25100 CT	MBR 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
Peak repetitive reverse surge current (Note 1)	I_{RRM}	1	0.5					A	
Maximum instantaneous forward voltage (Note 2)	V_F	-	-	0.75	0.65	0.85	0.75	0.95	V
		-	-	-	-	0.92	0.92	1.02	
		0.82	-	-	-	0.88	0.88	0.98	
Maximum reverse current @ rated VR $T_J=25\text{ }^\circ\text{C}$	I_R	0.2	0.2	0.1	0.1				mA
$T_J=125\text{ }^\circ\text{C}$		15	10	7.5	5				
Voltage rate of change (Rated VR)	dV/dt	10000							V/ μ s
Typical Thermal Resistance	$R_{\theta jc}$	1.0							$^\circ\text{C}/\text{W}$
Operating and Storage Temperature Range	T_J/T_{STG}	-55 to +150							$^\circ\text{C}$

Note:1、 Note 1: tp = 2.0 μ s, 1.0KHz 2、 Pulse test with PW=300 μ s, 1% duty cycle

Ratings and Characteristic Curves

FIG. 1- FORWARD CURRENT DERATING CURVE

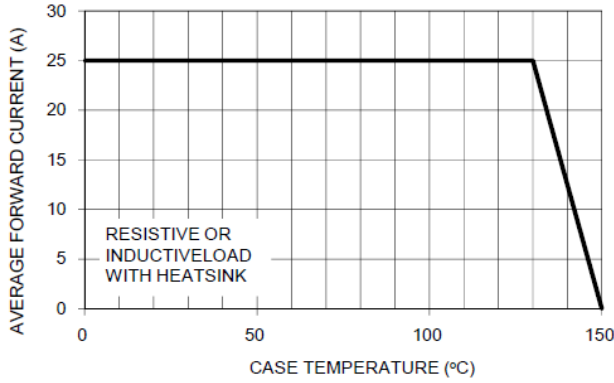


FIG. 2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

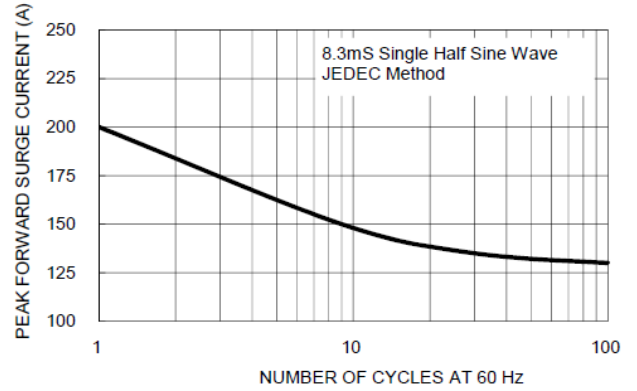


FIG. 3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER LEG

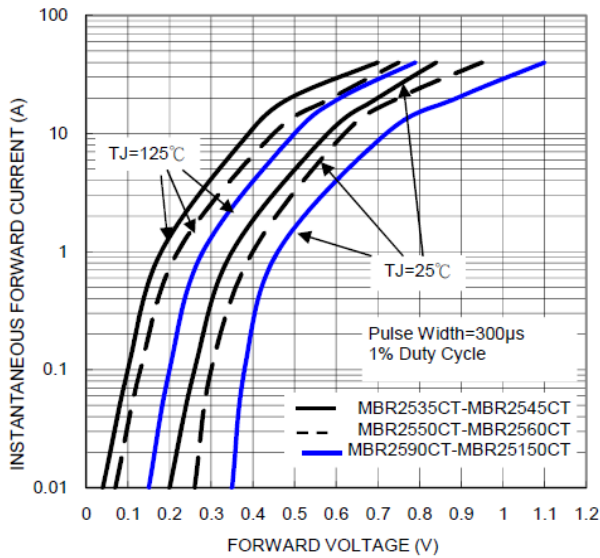


FIG. 4- TYPICAL REVERSE CHARACTERISTICS PER LEG

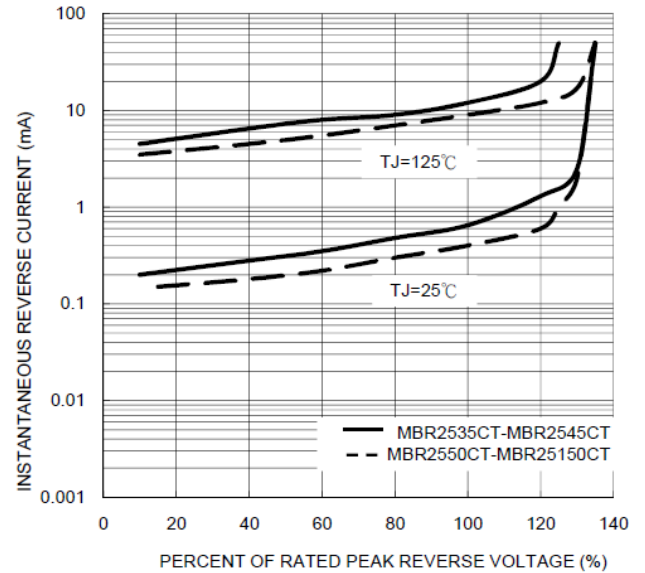


FIG. 5- TYPICAL JUNCTION CAPACITANCE PER LEG

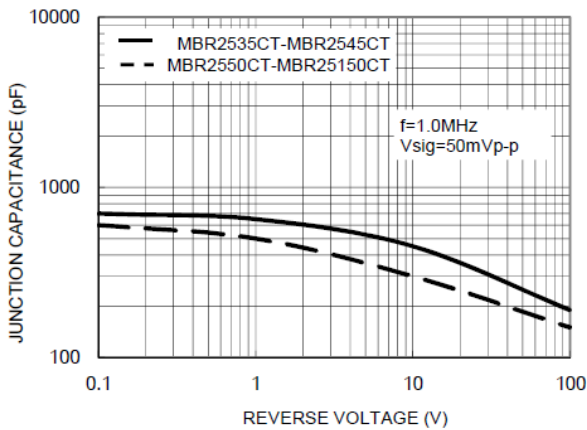
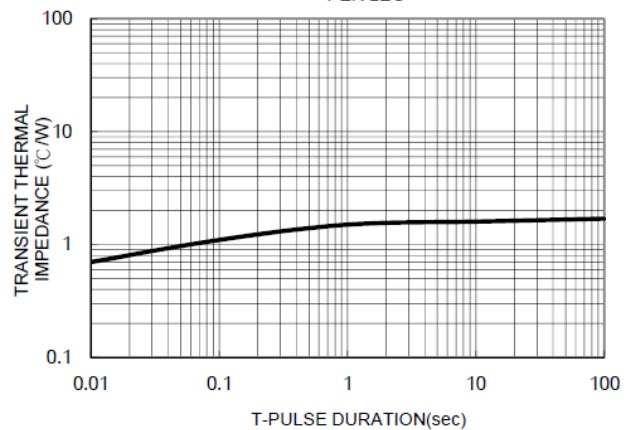


FIG. 6- TYPICAL TRANSIENT THERMAL IMPEDANCE PER LEG





MBR2535CT THRU MBR25150CT

Dual Common Cathode Schottky Rectifiers

Ordering Information

Part No.	Package	Packing
MBR2535CT~MBR25150CT	TO-220AB	50pcs/Tube