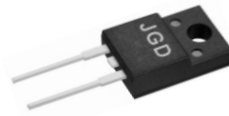


Features

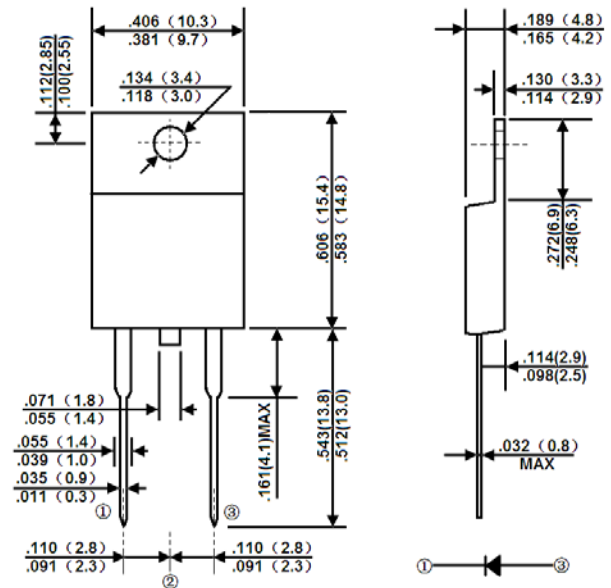
- * Low power loss, high efficiency
- * Guard-ring for overvoltage protection
- * High surge current capability
- * Compliant to RoHS Directive 2011/65/EU and in accordance to WEEE 2002/96/EC



RoHS
COMPLIANT

Package Outline Dimensions in inches (millimeters)

ITO-220AC:



Mechanical Data

- * Case: ITO-220AC
- * Molding compound, UL flammability classification rating 94V-0
- * Terminal: Matte tin plated leads, solderable per JESD 22-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 735	MBRF 745	MBRF 750	MBRF 760	MBRF 790	MBRF 7100	MBRF 7150	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	$I_{F(AV)}$	7.5							A
Peak repetitive forward current (Rated VR, square wave, 20KHz)	I_{FRM}	15							A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I_{FSM}	150							A
Peak repetitive reverse surge current (Note 1)	I_{RRM}	1.0	0.5					A	
Maximum instantaneous forward voltage (Note 2)	V_F	-	0.57	0.65	0.75	0.82	0.92	0.95	V
			0.84	-	-	-	-	-	
			0.72	-	-	-	-	-	
Maximum reverse current @ Rated VR	I_R	0.1							mA
		15	10	5					
Voltage rate of change (Rated VR)	dV/dt	10000							V/ μ s
Typical Thermal Resistance	$R_{\theta JC}$	7							°C/W
Operating junction temperature range	T_J	-55 to +150							°C
Storage Temperature Range	T_{STG}	-55 to +150							°C

Note:1: $t_p = 2.0 \mu s$, 1.0KHz 2: Pulse test with $PW=300 \mu s$, 1% duty cycle

Ratings and Characteristic Curves

FIG. 1- FORWARD CURRENT DERATING CURVE

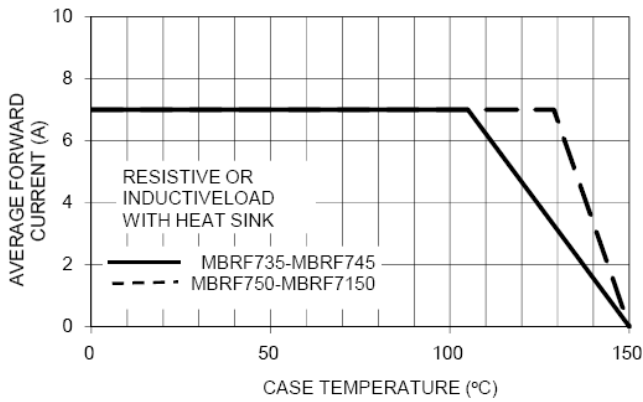


FIG. 2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

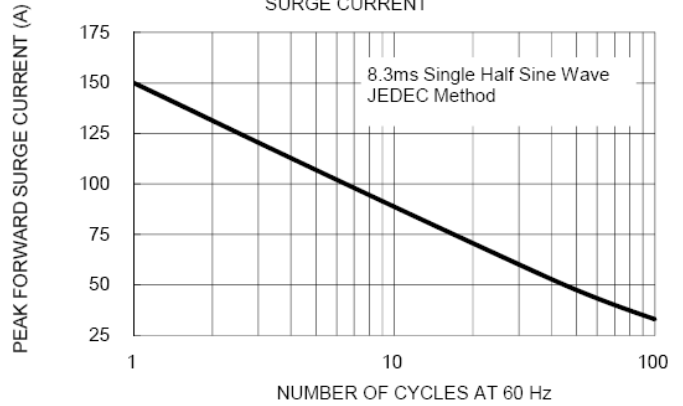


FIG. 3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

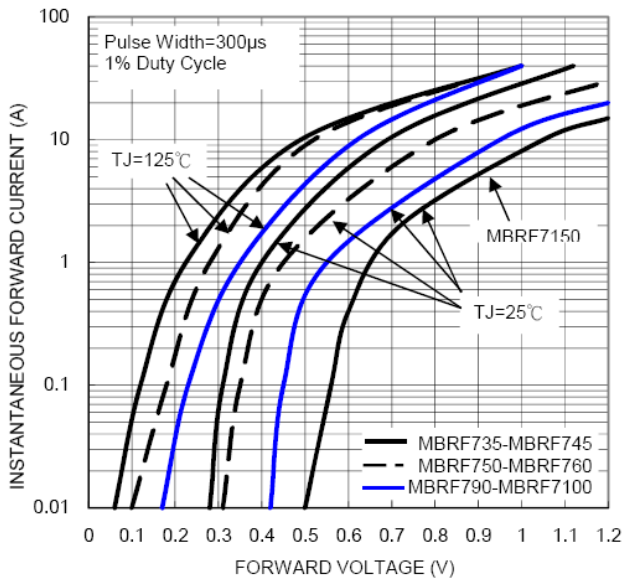


FIG. 4- TYPICAL REVERSE CHARACTERISTICS

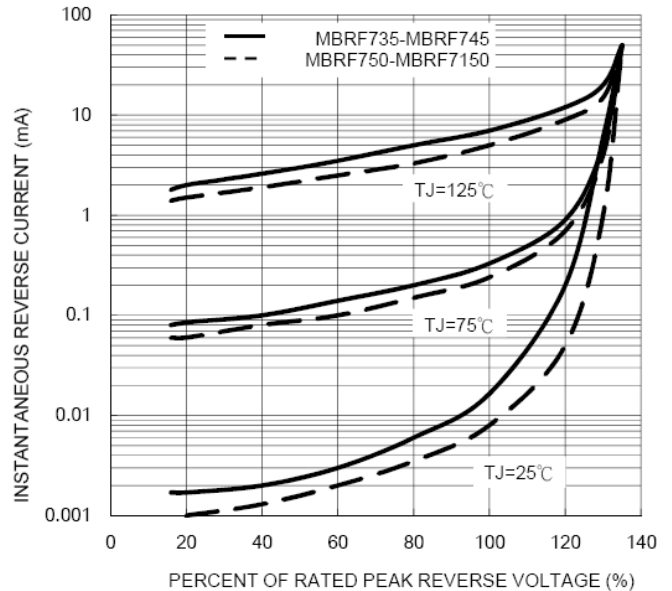


FIG. 5- TYPICAL JUNCTION CAPACITANCE

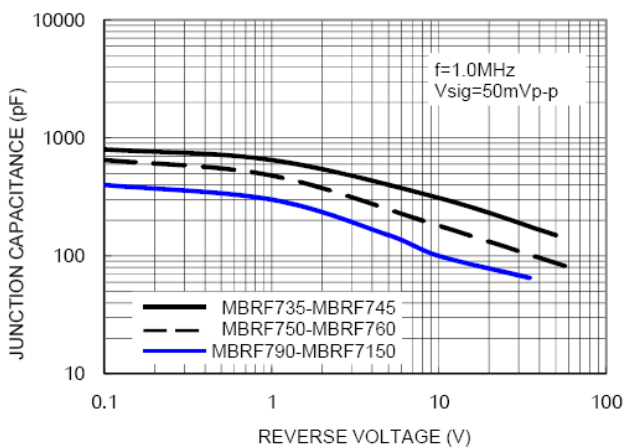
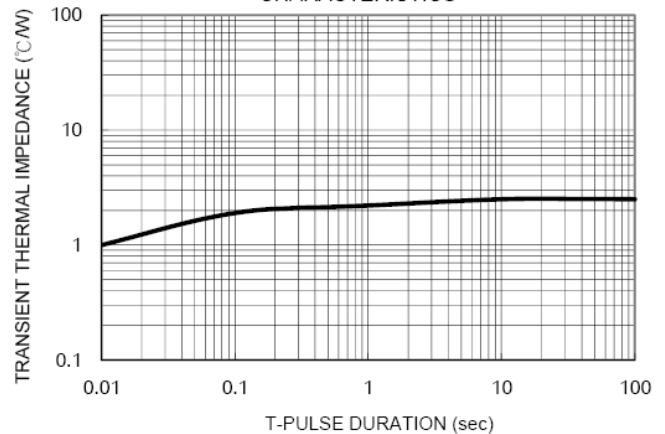


FIG. 6- TYPICAL TRANSIENT THERMAL CHARACTERISTICS





MBRF735 THRU MBRF7150

Isolated Schottky Barrier Rectifiers

Ordering Information

Part No.	Package	Packing
MBRF735~MBRF7150	ITO-220AC	50pcs/Tube