



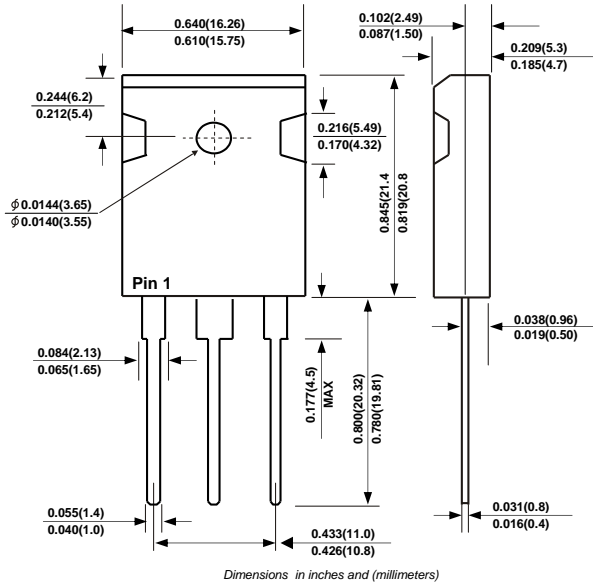
# MBR3035PT THRU MBR30200PT

## SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 35 and 200 Volts Forward Current - 30.0 Ampere

### TO-247AD/TO-3P

### FEATURES



- ◆ Plastic package has Underwriters Laboratory Flammability Classification 94V-0. Flame Retardant Epoxy Molding Compound.
- ◆ Metal silicon junction, majority carrier conduction.
- ◆ Low power loss, high efficiency.
- ◆ High current capability.
- ◆ Guardring for overvoltage protection.
- ◆ For use low voltage, high frequency inverters froo wheeling, and polarity protection application.
- ◆ In compliance with EU Rohs 2002/95/EC directives.

### MECHANICAL DATA

Case: TO-247AD/TO-3P, Molded plastic.

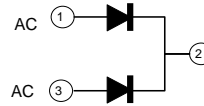
Terminals: Solderable per MIL-STD-750 Method 2026

Standard Packaging : Tube.

Polarity: As marked.

Mounting Position: Any.

Weight: 0.2245 Ounces(6.3673 grams)



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

PARAMETER	SYMBOLS	MBR30 35PT	MBR30 45PT	MBR30 50PT	MBR30 60PT	MBR30 80PT	MBR30 90PT	MBR30 100PT	MBR30 150PT	MBR30 200PT	UNITS
Maximum repetitive peak reverse voltage	$V_{RRM}$	35	45	50	60	80	90	100	150	200	Volts
Maximum RMS voltage	$V_{RMS}$	24.5	31.5	35	42	56	63	70	105	140	Volts
Minimum DC Breakdown Voltage	$V_{DC}$	35	45	50	60	80	90	100	150	200	Volts
Average Rectified current	$I_{F(AV)}$	30									Amp
Non-repetitive Peak Forward Surge Current at 1=8.3ms half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	275									Amps
Maximum Forward Voltage at $I_F=15A$ Per Diode	$V_F$	0.7		0.75			0.8		0.9		Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_J=25^\circ C$ $T_J=125^\circ C$	$I_R$			0.1					0.05		mA
Typical Thermal Resistance	$R_{\theta JC}$	1.4									°C/W
Operating Junction and Storage Temperature Range	TSTG	-50~+150			-65 ~ +175						°C

Note: Both bonding and chip structure are available.



# MBR3035PT THRU MBR30200PT

## RATINGS AND CHARACTERISTIC CURVES MUR3050PT THRU MUR30200PT

FIG. 1- FORWARD CURRENT DERATING CURVE

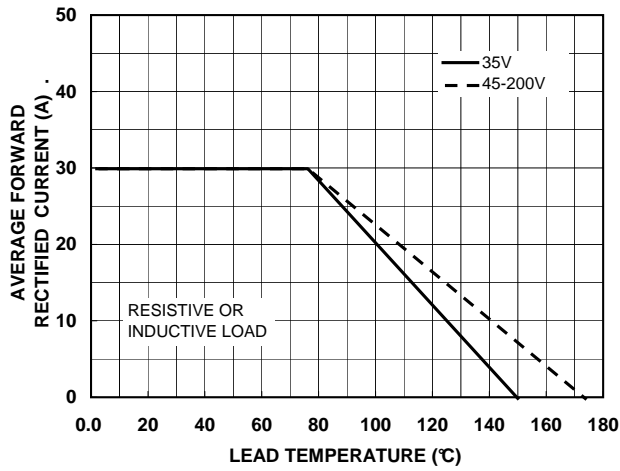


FIG. 2-TYPICAL FORWARD SURGE CHARACTERISTICS

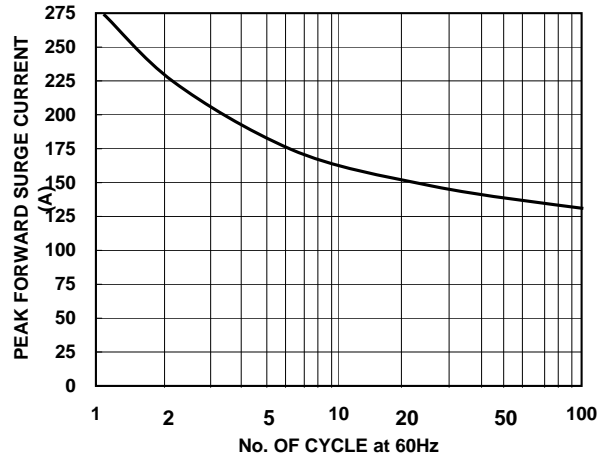


FIG. 3-TYPICAL REVERSE CHARACTERISTICS

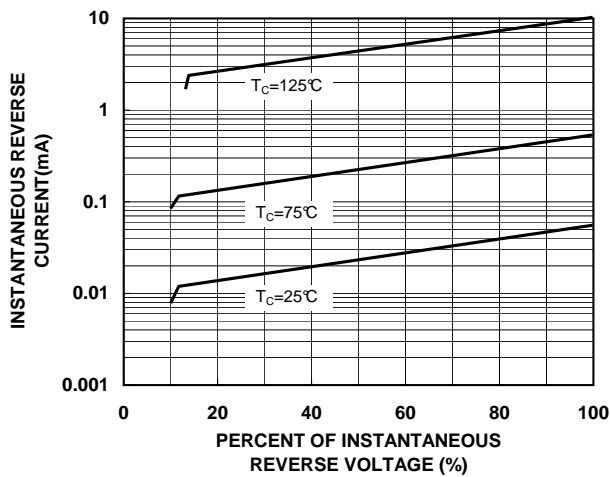


FIG. 4-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

