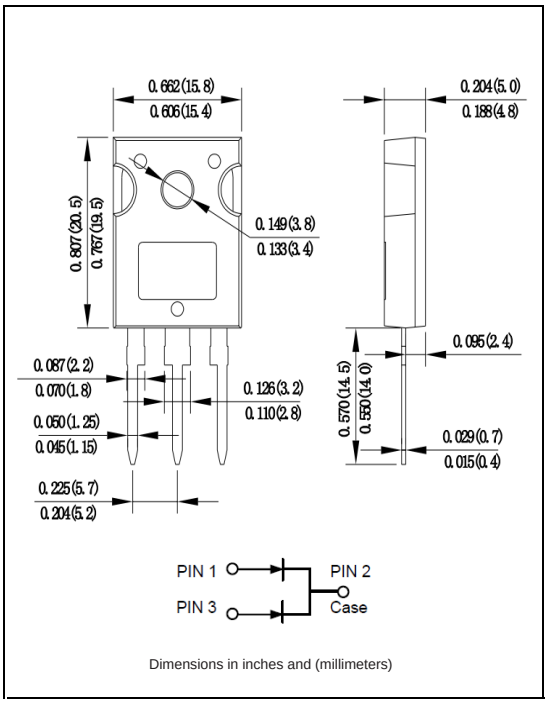
MBR3035PT~MBR30200PT

30Amp Schottky Barrier Rectifiers

Features

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon rectifier,majority carrier conduction
- Low reverse leakage
- Guardring for overvoltage protection
- High forward surge current capability
- High temperature soldering guaranteed: 250°C/10 seconds at terminals



Dimensions in inches and (millimeters)

Mechanical Data

Case: JEDEC TO-3P molded plastic body

Terminals: Solder plated, solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight : 0.2 ounce, 5.6 grams

Maximum Ratings And Electrical Characteristics

Ratings at 25℃ ambient temperature unless otherwise specified. Single phase half-wave 60Hz,resistive or inductive load, for capacitive load current derate by 20%.

	SYMBOLS	MBR 3035PT	MBR 3045PT	MBR 3060PT	MBR 3080PT	MBR 30100PT	MBR 30150PT	MBR 30200PT	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	35	45	60	80	100	150	200	VOLTS
Maximum RMS voltage	V_{RMS}	24	31	42	56	70	105	150	VOLTS
Maximum DC blocking voltage	V_{DC}	35	45	60	80	100	150	200	VOLTS
Maximum average forward rectified current	$I_{(AV)}$	30.0							Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	200.0							Amps
Maximum instantaneous forward voltage at 15A	V_F	0.60		0.70	0.85		0.90	0.95	Volts
Maximum DC reverse current T_A=25℃	I_R	0.5					0.1		mA
at rated DC blocking voltage T_A=100℃		20.0			10.0		2.0		
Typical thermal resistance (NOTE 1)	$R_{\theta JA}$	15.0							C/W
Operating junction and storage temperature range	T_J,T_{STG}	-55 to +150							°C

MBR3035PT THRU MBR30200PT

Ratings And Characteristic Curves

FIG. 1- FORWARD CURRENT DERATING CURVE

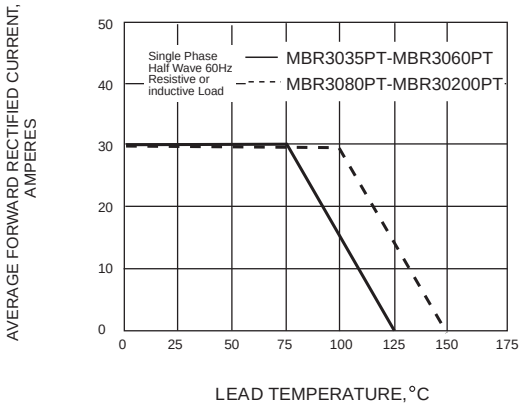


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

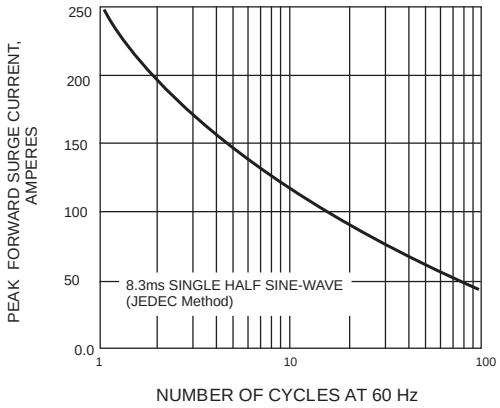


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

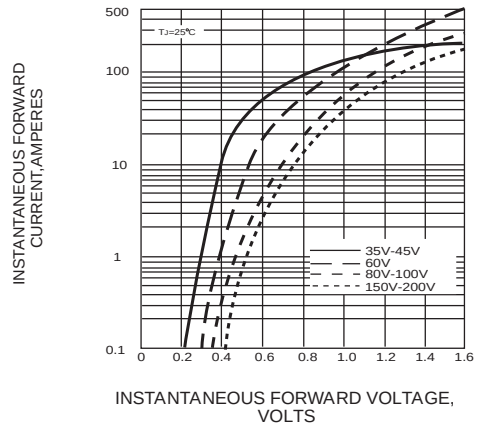


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

