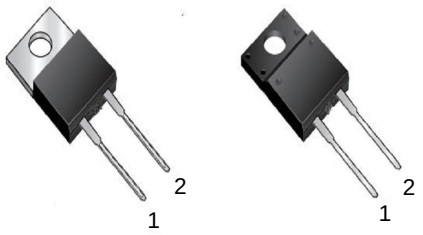
MBR2020(F)~MBR20200(F)

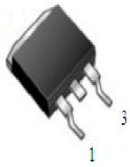
20.0Amp Schottky Barrier Rectifiers

Features

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Construction utilizes void-free molded plastic technique
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed: 250°C,MAX. for 10 seconds



TO-220AC ITO-220AC




TO-263 TO-252

PIN 1 PIN2 OR PIN3

Mechanical Data

Case: (I)TO-220AC,TO-263,TO-252 molded plastic body
Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
Polarity: As marked
Mounting Position: Any

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 2020(F)	MBR 2040(F)	MBR 2045(F)	MBR 2060(F)	MBR 20100(F)	MBR 20150(F)	MBR 20200(F)	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	20	40	45	60	100	150	200	VOLTS
Maximum RMS voltage	V_{RMS}	14	28	32	42	70	105	140	VOLTS
Maximum DC blocking voltage	V_{DC}	20	40	45	60	100	150	200	VOLTS
Maximum average forward rectified current (see fig.1)	$I_{(AV)}$	20.0							Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	175.0							Amps
Maximum instantaneous forward voltage at 20.0A	V_F	0.55	0.60		0.70	0.85	0.95		Volts
Maximum DC reverse current T_A=25℃	I_R	0.15				0.1			mA
at rated DC blocking voltage T_A=100℃		40.0				20.0			
Typical junction capacitance (NOTE 1)	C_J	700				300			pF
Typical thermal resistance (NOTE 2)	$R_{\theta JC}$	23							°C/W
Operating junction temperature range	T_J	-55 to +125				-55 to +150			°C
Storage temperature range	T_{STG}	-55 to +150							°C

Note:1.Measured at 1MHz and applied reverse voltage of 4.0V D.C.

2.Thermal resistance from junction to case

Ratings And Characteristic Curves

MBR2020(F)~MBR20200(F)

FIG. 1- FORWARD CURRENT DERATING CURVE

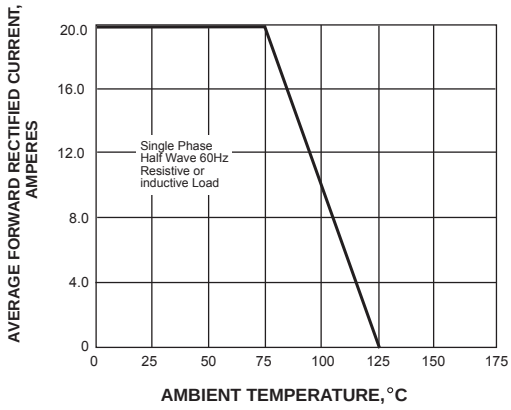


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

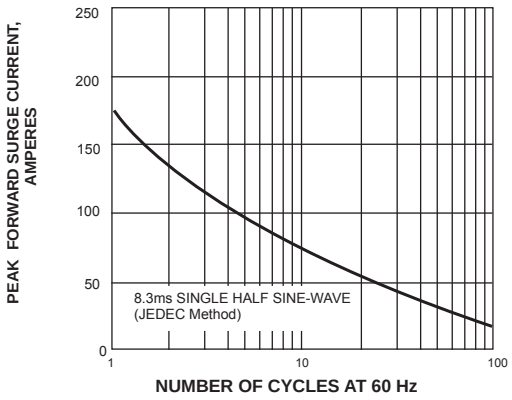


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

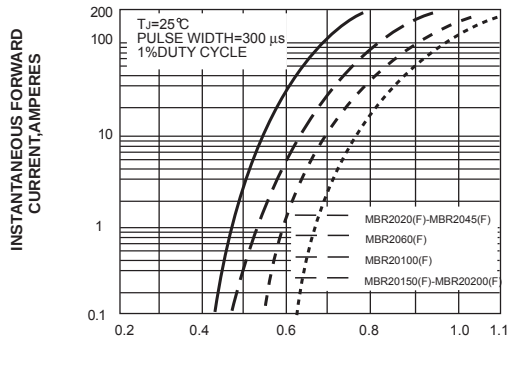
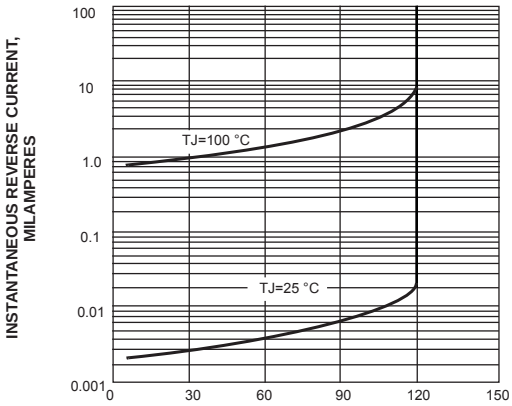
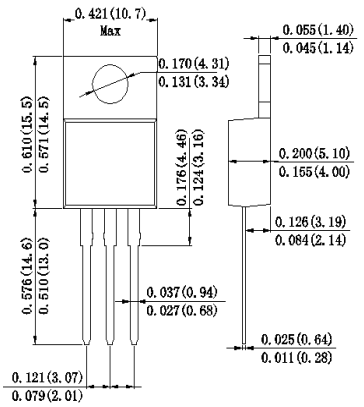


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

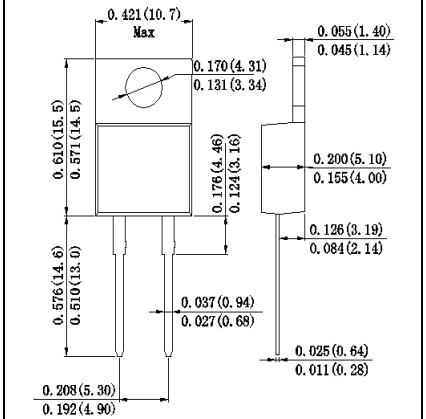


Outline Drawing

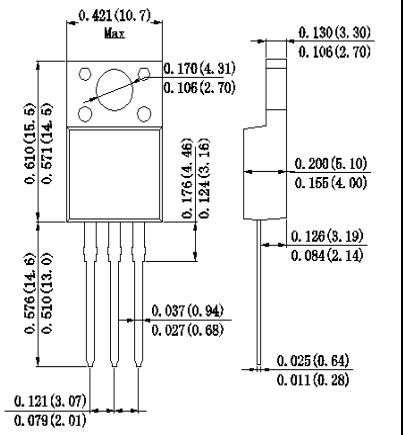
TO-220AB



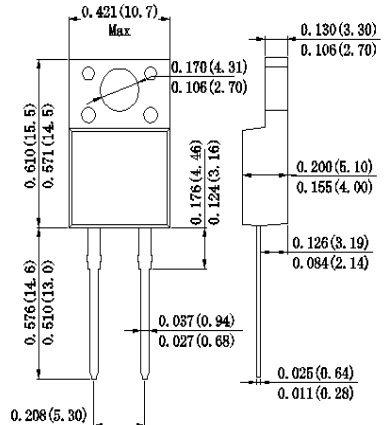
TO-220AC



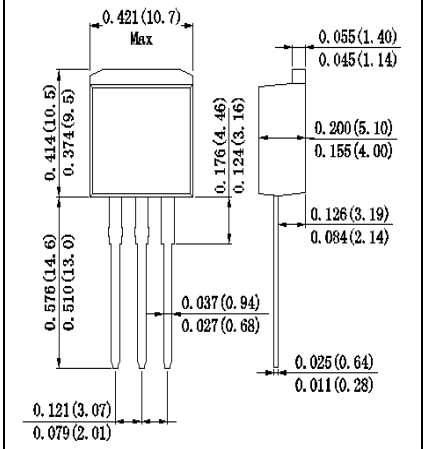
ITO-220AB



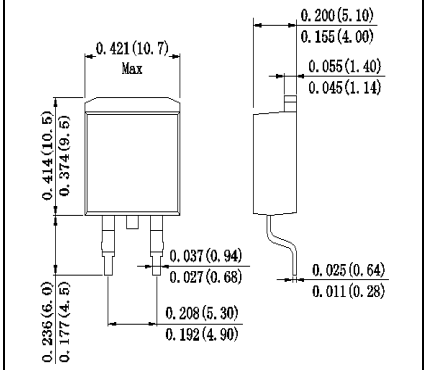
ITO-220AC



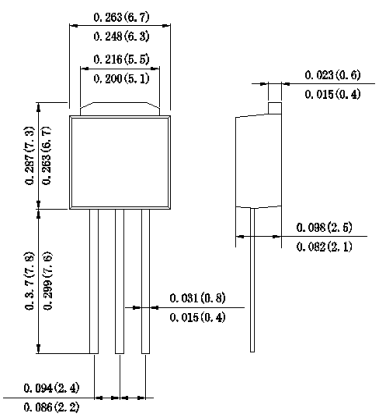
TO-262



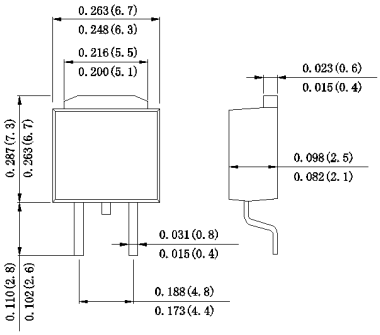
TO-263



TO-251



TO-252



Note: All dimensions in inches and (millimeters)