

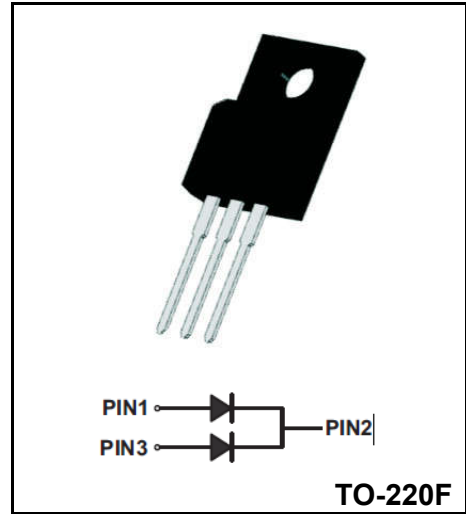
## SCHOTTKY BARRIER RECTIFIERS

Reverse Voltage - 40 to 200 V

Forward Current - 60A

### Features

- ◆The plastic package carries Underwriters Laboratory Flammability Classification 94V-O
- ◆Construction utilizes void-free molded plastic technique
- ◆Low reverse leakage
- ◆High forward surge current capability
- ◆High temperature soldering guaranteed 250°C/10 seconds at terminals



### Mechanical Data

- ◆Case: TO-220F
- ◆Approx. Weight: 1.7g ( 0.063 oz)
- ◆Terminals: Lead solderable per MIL-STD-202, Method 208

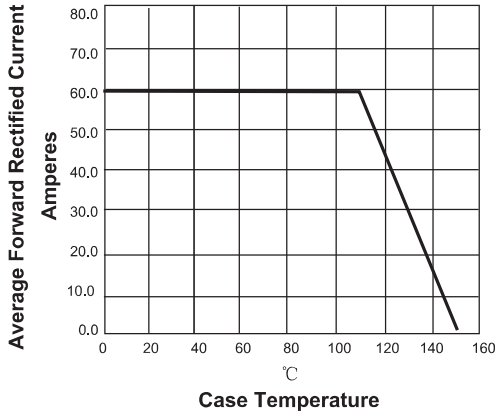
### Maximum Ratings (Per Leg) At Ta=25°C Unless Otherwise Specified

CHARACTERISTICS		SYMBOLS	MBR6040 FCT	MBR6045 FCT	MBR6060 FCT	MBR60100 FCT	MBR60150 FCT	MBR60200 FCT	Units
Maximum Repetitive Peak Reverse Voltage		$V_{RRM}$	40	45	60	100	150	200	V
Maximum RMS voltage		$V_{RMS}$	28	31.5	42	70	105	140	V
Maximum DC Blocking Voltage		$V_{DC}$	40	45	60	100	150	200	V
Maximum Average Forward Rectified Current Tc=110°C	Per device	$I_{F(AV)}$	60						A
	Per diode		30						A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)		$I_{FSM}$	250						A
Instantaneous forward voltage at 30A		$V_F$	0.55		0.70	0.85	0.95		V
Maximum DC Reverse Current at Rated DC Reverse Voltage		$I_R$	0.5 50			0.05 10			mA
Typical Thermal Resistance		$R_{\theta JA}$	3.5						°C/W
Operation Junction Temperature Range		$T_j$	-55 ~ +150						°C
Storage Temperature Range		$T_{stg}$	-55 ~ +150						°C

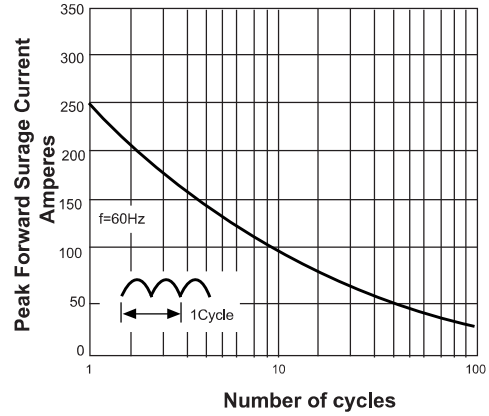
(1) Measured at 1 MHz and applied reverse voltage of 4 V D.C.

**Ratings and Characteristic Curves**

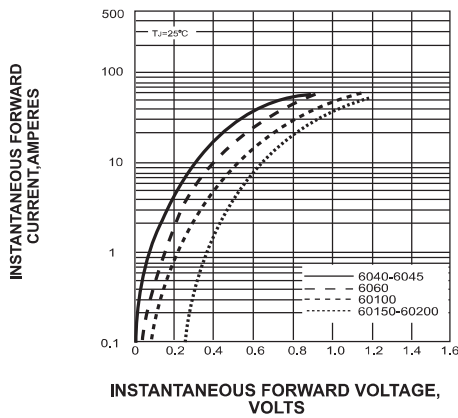
**FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT**



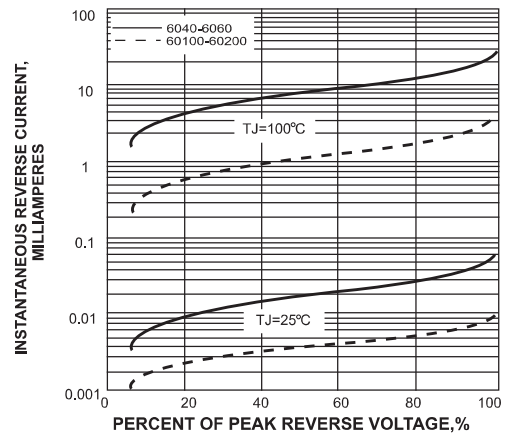
**FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG**



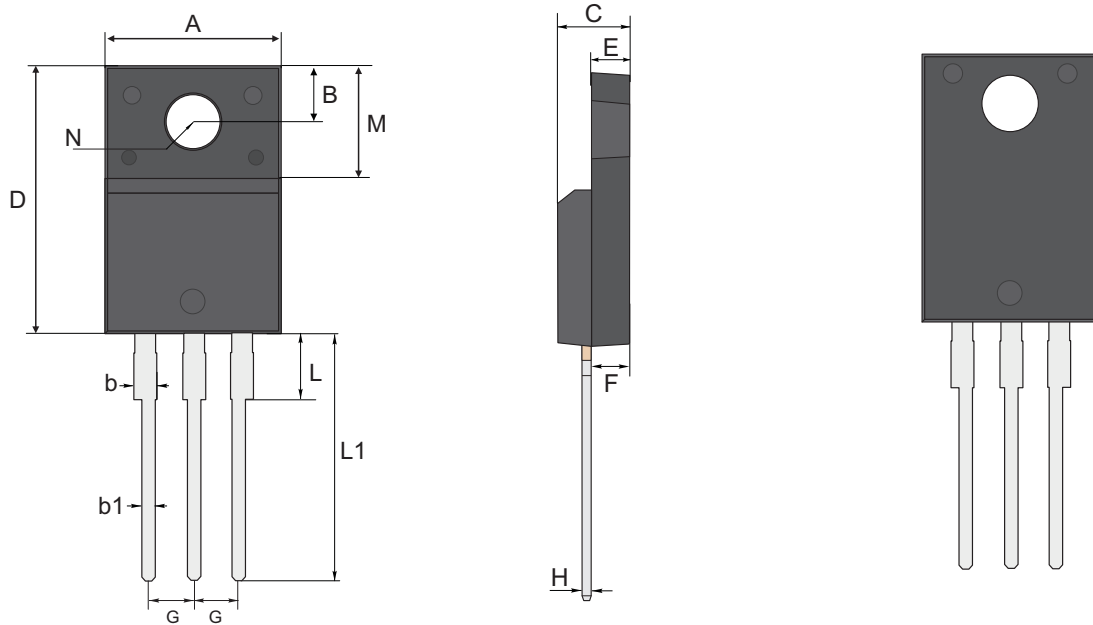
**FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS**



**FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS**



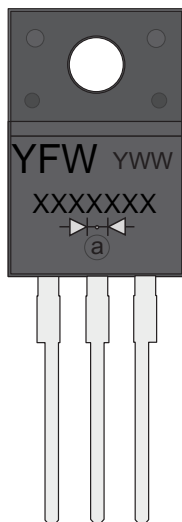
Package Outline Dimensions Millimeters



TO-220F

UNIT		A	B	b	b1	C	D	E	F	G	H	L	L1	M	N
mm	max	10.28	3.37	1.34	0.9	4.9	16.07	2.74	2.74	2.64	0.60	2.85	13.7	6.88	3.18 TYPICAL
	typ	10.18	3.27	1.24	0.8	4.7	15.87	2.54	2.54	2.54	0.50	2.65	13.5	6.68	
	min	10.08	3.17	1.14	0.7	4.5	15.67	2.34	2.34	2.44	0.40	2.45	13.3	6.48	
mil	max	405	133	53	35	193	630	108	108	104	27	112	539	271	125 TYPICAL
	typ	401	129	49	31	185	590	100	100	100	20	104	531	267	
	min	397	125	45	28	177	580	92	92	96	16	96	524	255	

Marking on the body



YWW: Date Code  
Y:Years(0~9)  
WW:Week  
XXXXXXX : Product name  
(NOTE: The weekly code is based on the actual number of weeks in the calendar year.)