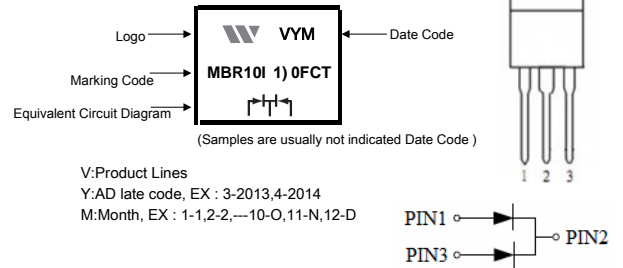


**10A Ultra Low VF Trench MOS Schottky Rectifiers - 1 0V**

PRIMARY CHARACTERISTICS	
$I_o$	5A×2
$V_{RRM}$	150V
$I_{FSM}$	125A
$V_F@5A, T_J=125^\circ C$	0.62V
$T_J \text{ Max}$	150°C

**FEATURES**

- EXTREMELY LOW VF
- TRENCH MOS SCHOTTKY TECHNOLOGY
- LOW POWER LOSS / HIGH EFFICIENCY
- HIGH FREQUENCY OPERATION
- HALOGEN FREE
- HIGH FORWARD SURGE CAPABILITY
- MOUNTING AND SOLDERING INFORMATION

**ITO-220 PACKAGE**
**• Body Marking Example**

**MECHANICAL DATA**

- CASE : TRANSFER MOLDED, ITO-220
- LEADS : SOLDERABLE PER MIL-STD-202, METHOD 208
- POLARITY : AS MARKED
- TERMINALS : PURETIN PLATED

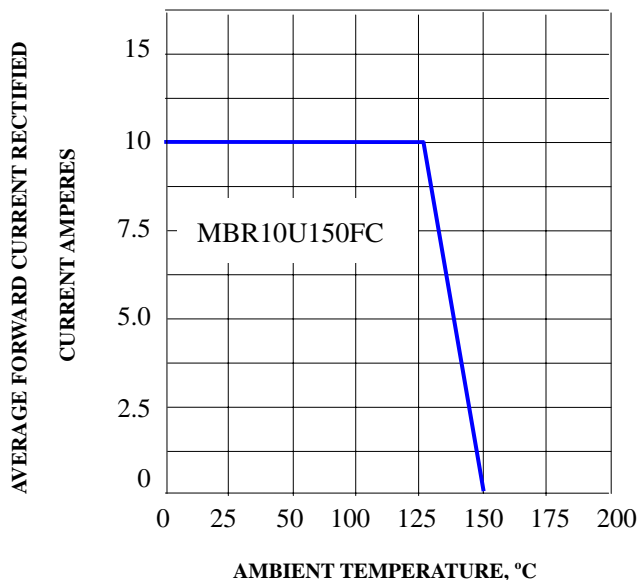
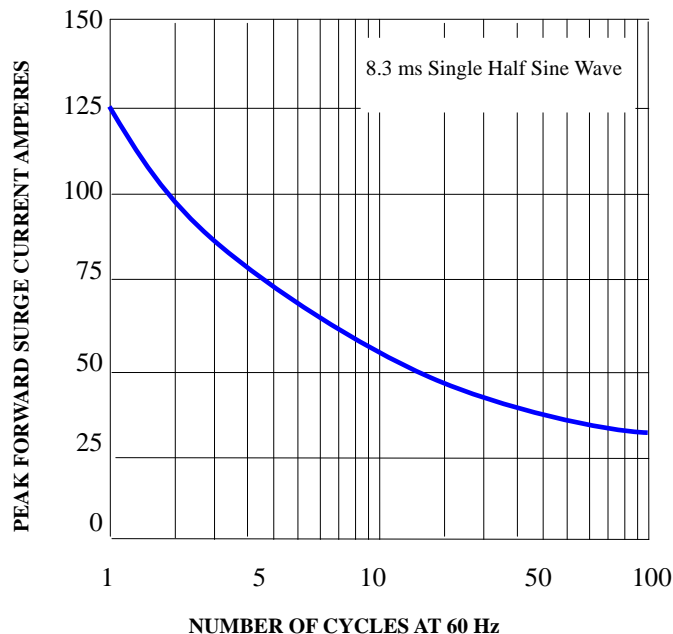
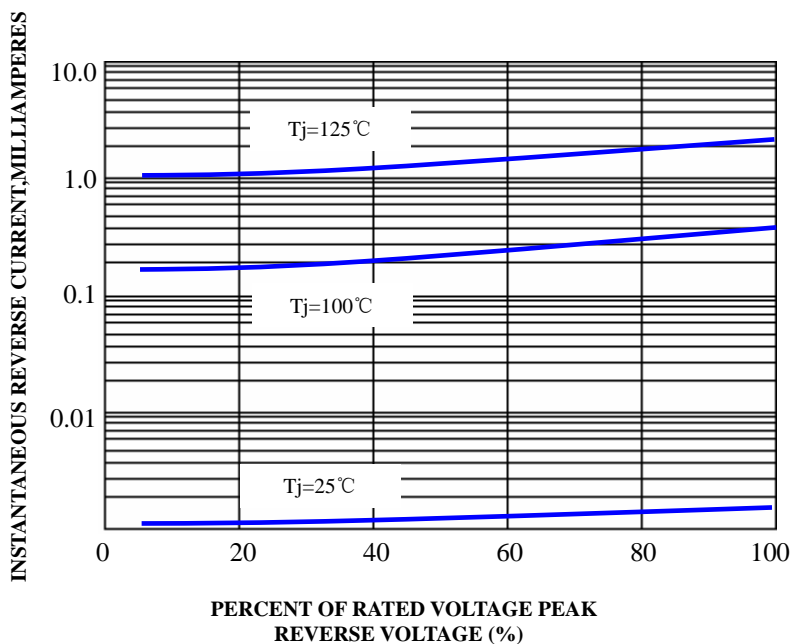
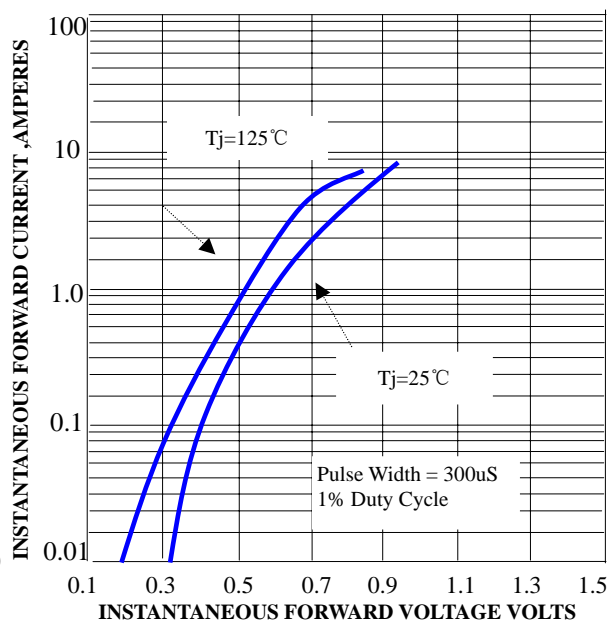
**MAXIMUM RATINGS ( $T_A = 25^\circ C$  UNLESS OTHERWISE NOTED) AND ELECTRICAL CHARACTERISTICS**

RATINGS	SYMBOL	MBR10U372FCT	UNITS
MAXIMUM RECURRENT PEAK REVERSE VOLTAGE	$V_{RRM}$	150	V
MAXIMUM RMS VOLTAGE	$V_{RMS}$	105	V
MAXIMUM DC BLOCKING VOLTAGE	$V_{DC}$	150	V
MAXIMUM AVERAGE FORWARD RECTIFIED CURRENT SEE FIG.1 PER LEG	$I_o$	10 5	A
PEAK FORWARD SURGE CURRENT, 8.3ms SINGLE HALF SINE-WAVE SUPERIMPOSED ON RATED LOAD PER LEG	$I_{FSM}$	125	A
OPERATING JUNCTION TEMPERATURE RANGE	$T_J$	- 55 TO + 150	°C
STORAGE TEMPERATURE RANGE	$T_{STG}$	- 55 TO + 175	°C

RATINGS	SYMBOL	MIN	TYP	MAX	UNITS
MAXIMUM FORWARD VOLTAGE AT $I_F = 5A$ $T_J = 25^\circ C$ $T_J = 125^\circ C$	VF	--	--	<b>0.2</b> <b>0.86</b>	V
MAXIMUM REVERSE CURRENT $V_R = V_{RRM}$ @ $T_J = 25^\circ C$ PER LEG (NOTE 1)	$I_R$		0.05		mA
MAXIMUM REVERSE CURRENT $V_R = V_{RRM}$ @ $T_J = 125^\circ C$ PER LEG (NOTE 1)	$I_R$		10		mA
TYPICAL THERMAL RESISTANCE JUNCTION TO CASE PER LEG	$R_{\theta jc}$		4.0		°C/W
ISOLATION VOLTAGE (ITO-220 ONLY) FROM TERMINAL TO HEATSINK $T = 1MIN$	$V_{AC}$		1500		V

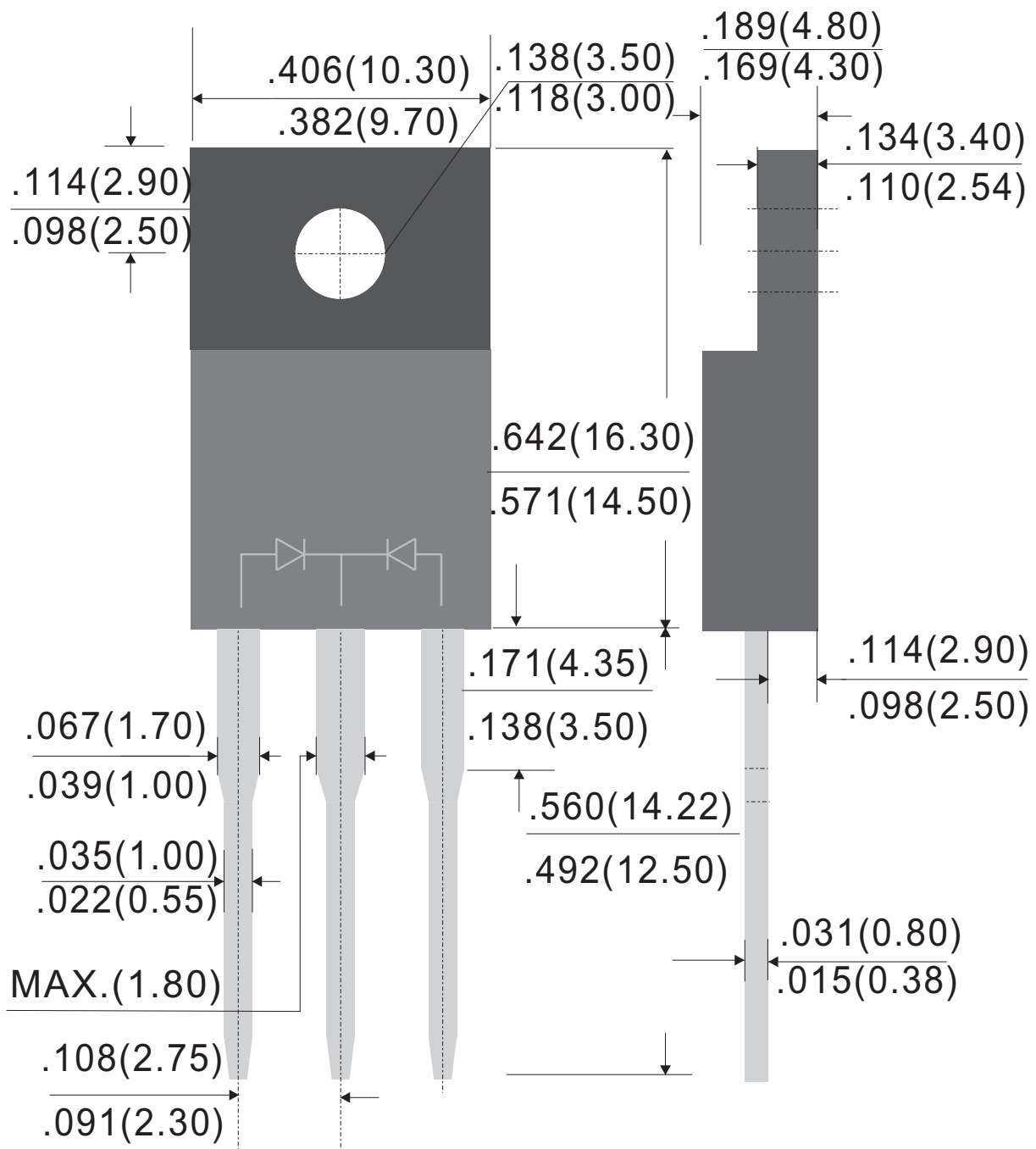
NOTES : 1. PULSE TEST: 300µS PULSE WIDTH, 1% DUTY CYCLE.

## RATINGS AND CHARACTERISTIC CURVES

**FIG. 1-FORWARD CURRENT DERATING CURVE**

**FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE RATING**

**FIG. 3- TYPICAL REVERSE CHARACTERISTICS**

**FIG. 4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**


# Outline Drawing

# ITO-220



Dimensions in inches and (millimeters)

Rev.H

**Ordering Information:**

Device PN	Packing
MBR10U150FCT - <sup>(1)</sup> G <sup>(2)</sup> -WS	Tube Packing:50pcs/Tube; 1000pcs/Box

**Note:** 1. Packing code: Empty is Tube Packing

2. RoHS product for packing code suffix "G", Halogen free product for packing code suffix "H" .

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