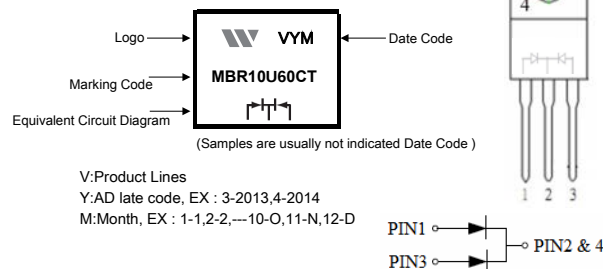


10A Low VF Trench MOS Schottky Rectifiers - 60V

PRIMARY CHARACTERISTICS	
I_O	5A×2
V_{RRM}	60V
I_{FSM}	150A
$V_F@5A, T_J=125^{\circ}C$	0.44V
$T_J \text{ Max}$	150°C

FEATURES

- EXTREMELY LOW VF
- TRENCH MOS SCHOTTKY TECHNOLOGY
- LOW POWER LOSS / HIGH EFFICIENCY
- HIGH FREQUENCY OPERATION
- HALOGEN FREE
- HIGH FORWARD SURGE CAPABILITY
- MOISTURE SENSITIVITY LEVEL 1

TO-220 PACKAGE
• Body Marking Example

MECHANICAL DATA

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

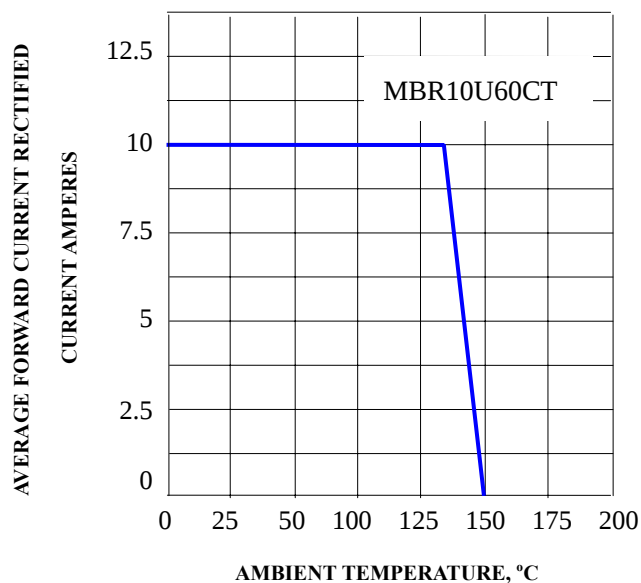
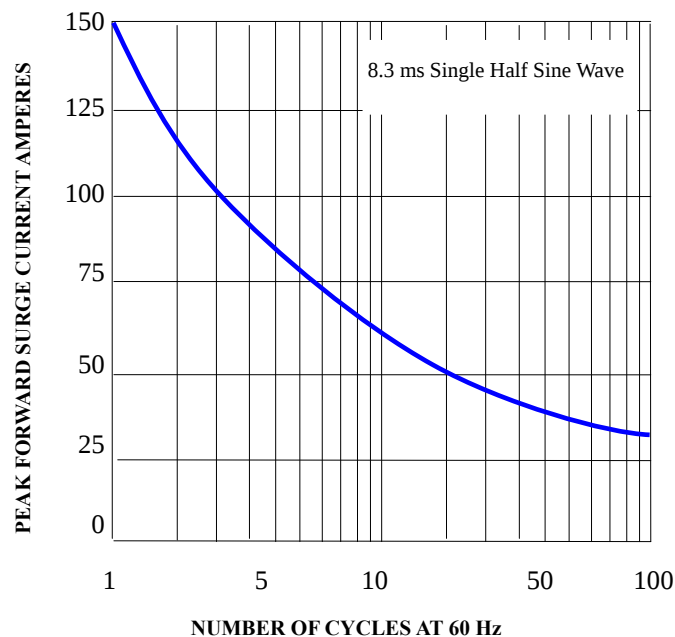
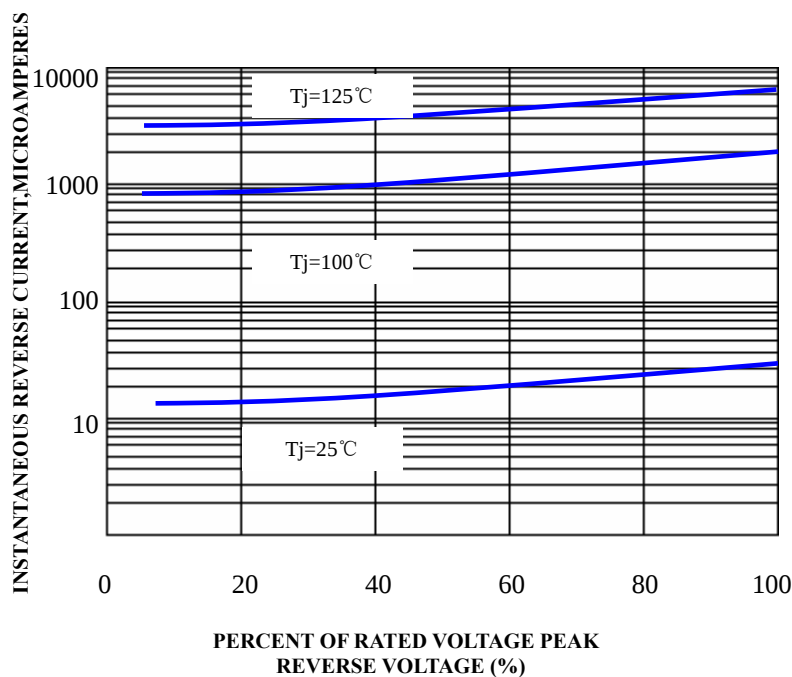
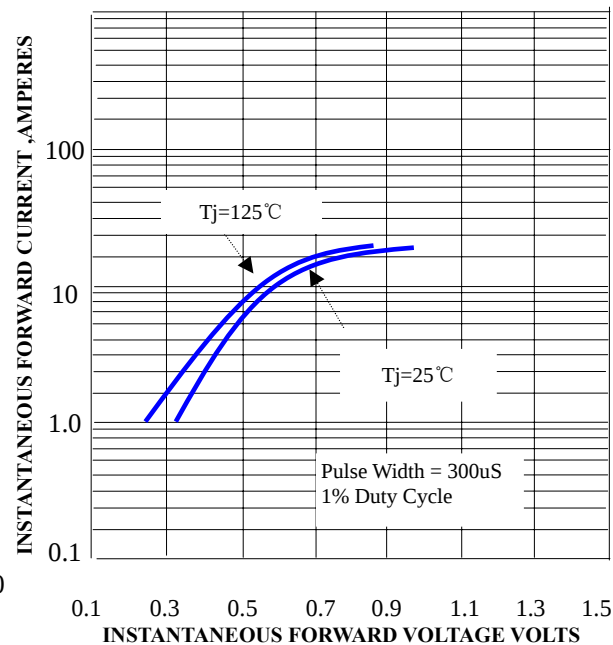
MAXIMUM RATINGS ($T_A=25^{\circ}C$ UNLESS OTHERWISE NOTED) AND ELECTRICAL CHARACTERISTICS

RATINGS	SYMBOL	MBR10U60CT	UNITS
MAXIMUM RECURRENT PEAK REVERSE VOLTAGE	V_{RRM}	60	V
MAXIMUM RMS VOLTAGE	V_{RMS}	42	V
MAXIMUM DC BLOCKING VOLTAGE	V_{DC}	60	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}	150	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 $I_F=5A$ $T_J=25^{\circ}C$ AT $I_F=10A$ $T_J=125^{\circ}C$ $T_J=25^{\circ}C$ $T_J=125^{\circ}C$	VF	-- -- -- --	-- 0.44 -- --	0.50 0.46 0.60 0.58	V
MAXIMUM REVERSE CURRENT $V_R = V_{RRM}$ @ $T_J=25^{\circ}C$ PER LEG (NOTE 1) MAXIMUM REVERSE CURRENT $V_R = V_{RRM}$ @ $T_J=125^{\circ}C$ PER LEG (NOTE 1)	I_R		0.3 25		mA
TYPICAL THERMAL RESISTANCE JUNCTION TO CASE PER LEG	$R_{\theta jc}$		2.2		°C/W
ISOLATION VOLTAGE(ITO-220 ONLY)FROM TERMINAL TO HEATSINK T=1MIN	V_{AC}		/		V

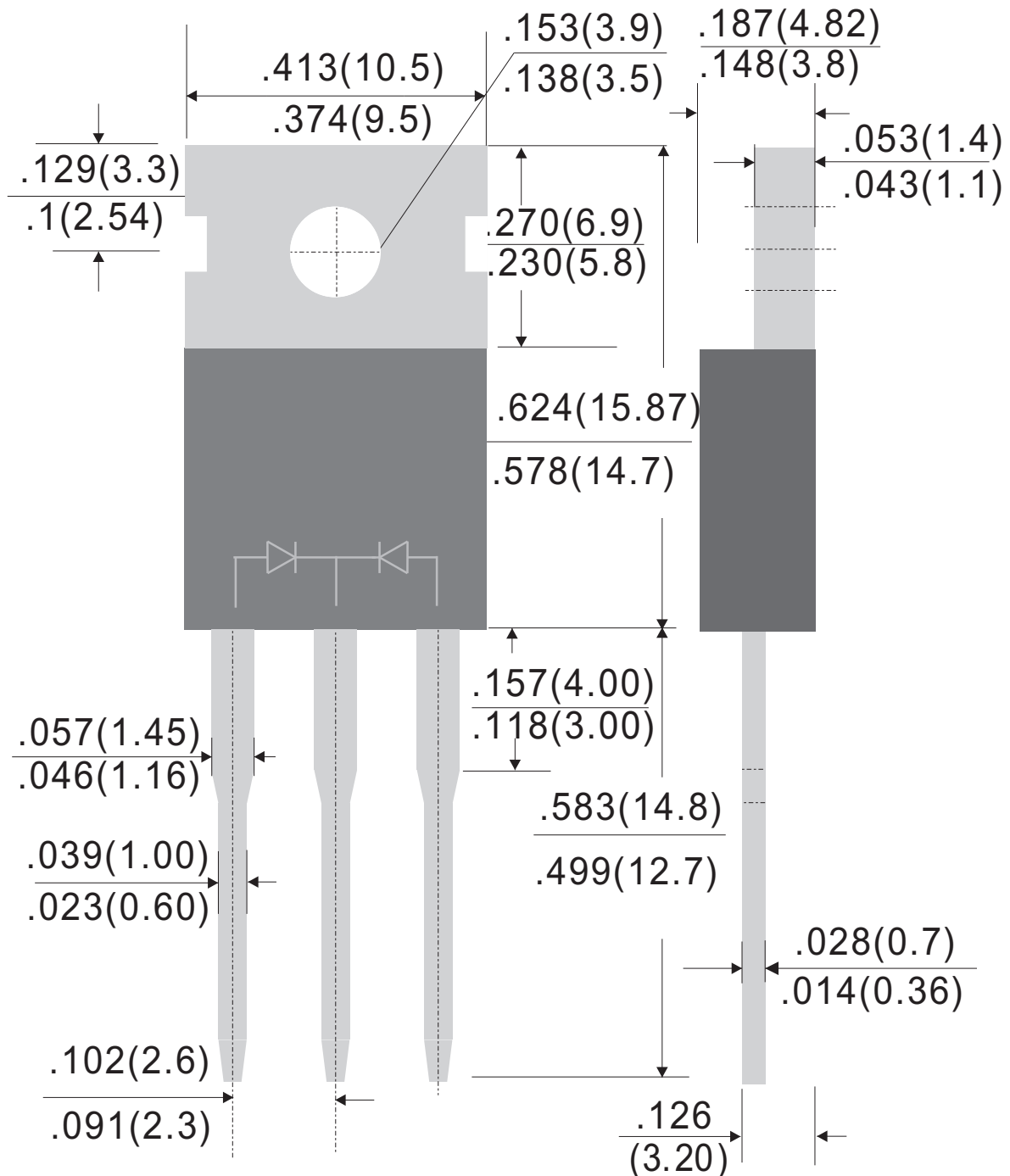
NOTES : 1. PULSE TEST: 300μS PULSE WIDTH, 1% DUTY CYCLE.

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

TO-220



Dimensions in inches and (millimeters)

Rev.E-1

Ordering Information:

Device PN	Packing
MBR10U60CT - ⁽¹⁾ G ⁽²⁾ -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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