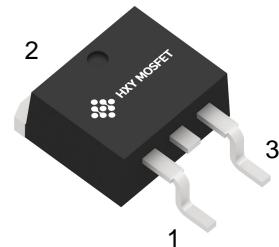




Features

- Low power loss, high efficiency
- High surge capacity
- Metal silicon junction, majority carrier conduction.
- High current Capability, low forward voltage drop.
- Guard ring for over voltage protection.



Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
MBRB1040CT- MBRB10200CT	TO-263	MBRB10x	800

x: From 40-200CT

TO-263



Maximum Ratings Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified

Parameter	Symbol	MBRB 1040 CT	MBRB 1045 CT	MBRB 1050 CT	MBRB 1060 CT	MBRB 1080 CT	MBRB 1090 CT	MBRB 10100 CT	MBRB 10150 CT	MBRB 10200 CT	Unit						
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	40	45	50	60	80	90	100	150	200	V						
Maximum RMS Voltage	V_{RMS}	28	31.5	35	42	56	63	70	105	140							
Maximum DC Blocking Voltage	$V_{R(DC)}$	40	45	50	60	80	90	100	150	200							
Maximum Average Forward Current	$I_{F(AV)}$	10									A						
Peak Forward Surge Current: 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	150															
Maximum Forward Voltage at 5A per leg	V_F	0.65		0.72		0.85		0.92		V							
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	0.1									mA						
	$T_j=125^\circ C$	20															
Maximum Operating Junction Temperature	T_j	150				175				°C							
Storage Temperature	T_{stg}	-55~+150				-65~+175											
Typical Thermal Resistance	$R_{\theta JC}$	1.4									°C/W						



Typical Characteristics

FIG. 1- FORWARD CURRENT DERATING CURVE

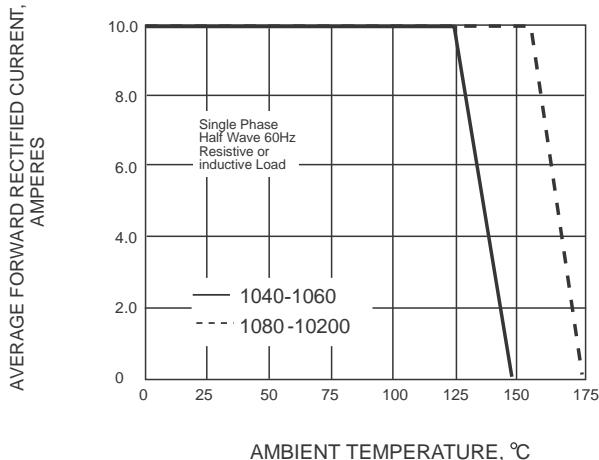


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

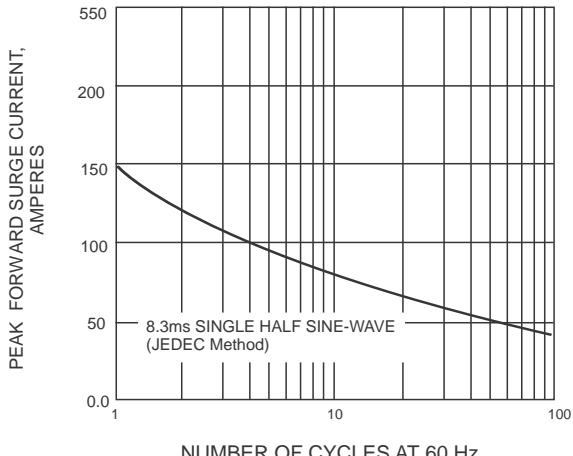


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

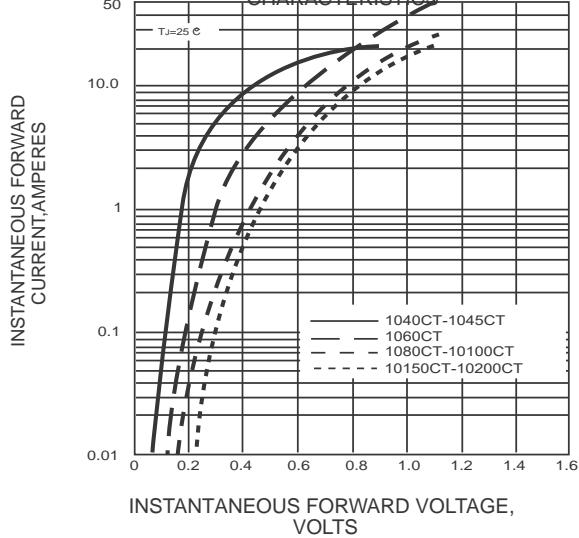
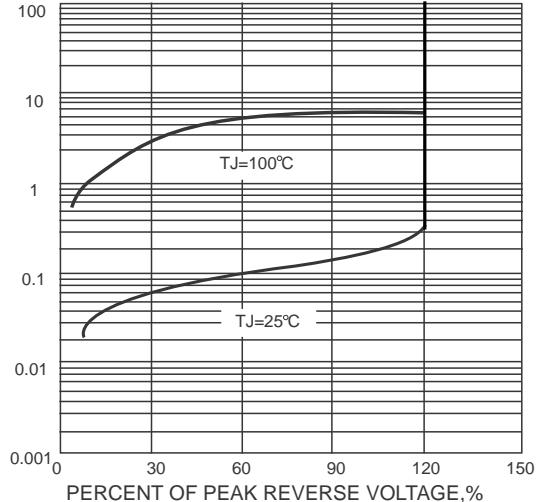


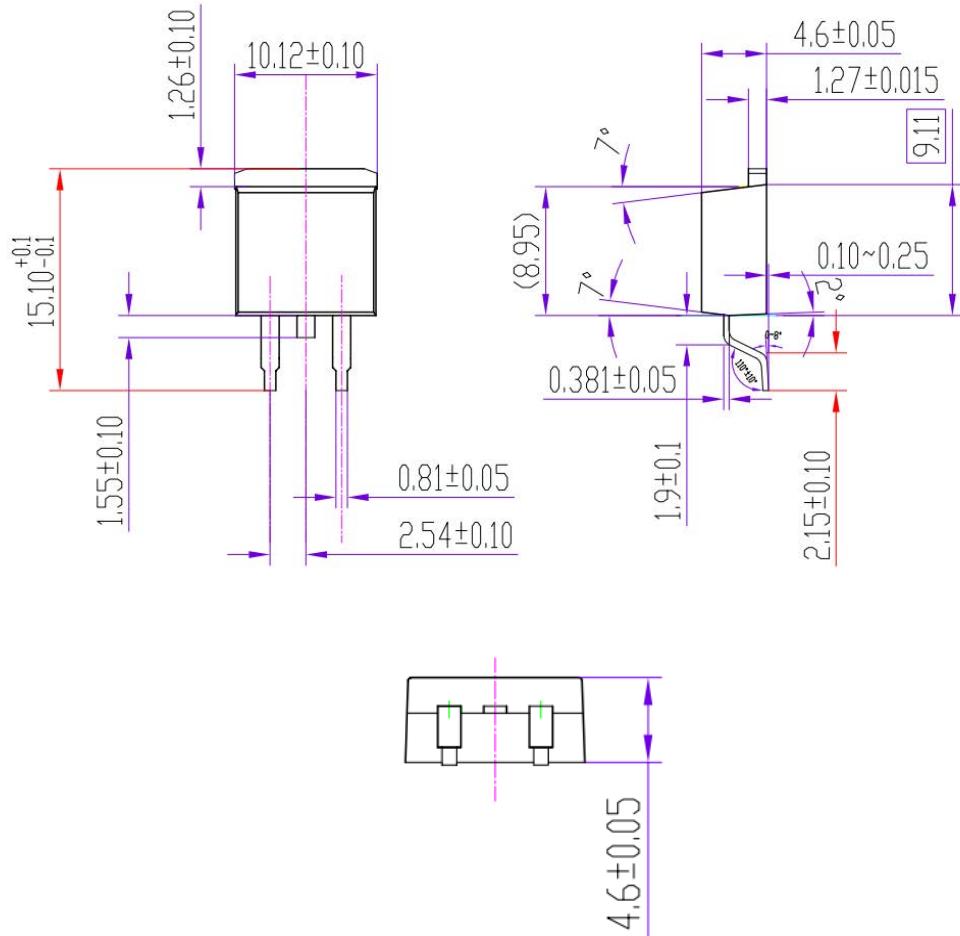
FIG. 4-TYPICAL REVERSE CHARACTERISTICS





Package Dimensions

Package TO-263





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