

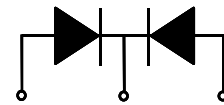
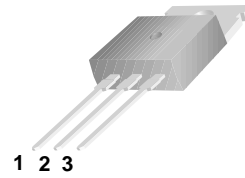
MBR4040CT - MBR40200CT



40A SCHOTTKY BARRIER RECTIFIER

Features

- High Surge Capability
- Low Forward Voltage Drop
- High Current Capability
- Super Fast Switching Speed For High Efficiency



1. Anode 2. Cathode 3. Anode

TO-220

Absolute Maximum Ratings $T_C=25^\circ\text{C}$ unless otherwise noted

PARAMETER	SYMBOL	4040	4045	4050	4060	4080	4090	40100	40150	40200	UNITS
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	V
Maximum DC Blocking Voltage	V_{DC}	40	45	50	60	80	90	100	150	200	V
Maximum Average Forward Current	$I_{F(AV)}$	40									A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	350									A
Maximum Forward Voltage at 20A per leg	V_F	0.7	0.79		0.82			0.92		V	
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	0.1 20						0.05 20		mA	
Typical Thermal Resistance	$R_{\theta JC}$	1.2									$^\circ\text{C} / \text{W}$
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55 to +150				-65 to +175					$^\circ\text{C}$

* Pulse Test: Pulse Width=300 μs , Duty Cycle=2%

Typical Characteristics

RATING AND CHARACTERISTIC CURVES

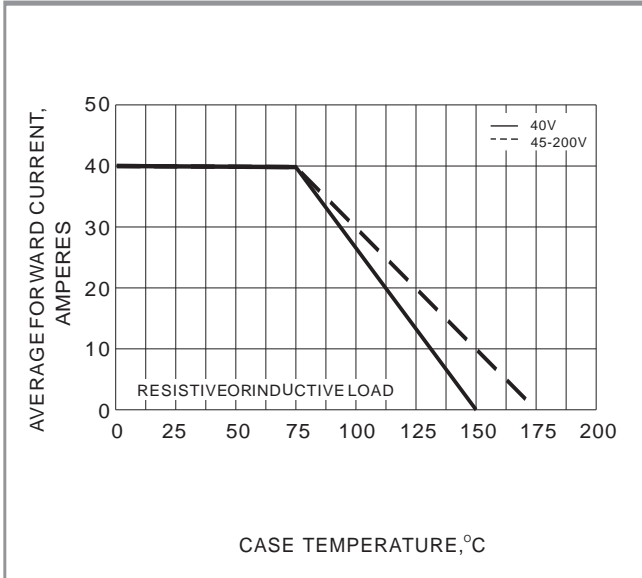


Fig.1-FORWARD CURRENT DERATING CURVE

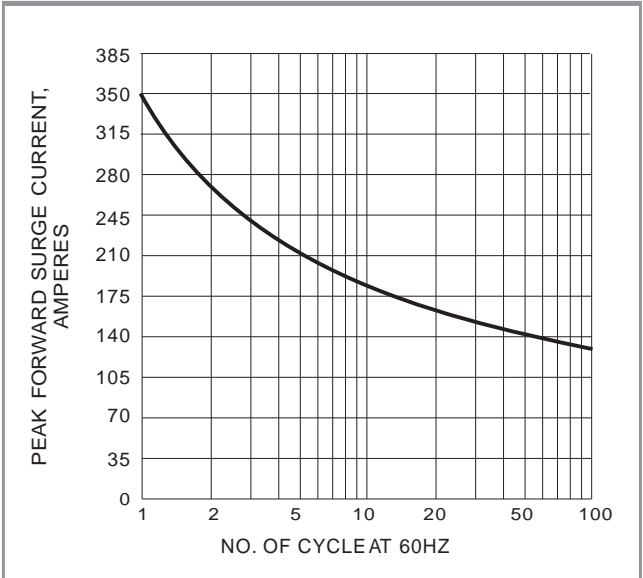


Fig.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

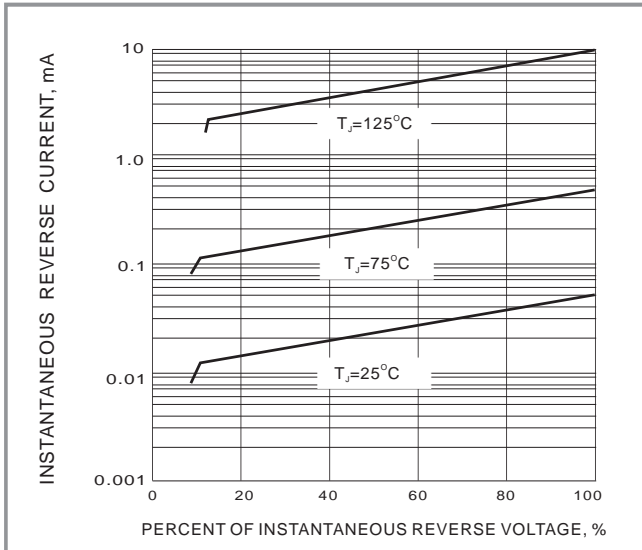


Fig.3-TYPICAL REVERSE CHARACTERISTIC

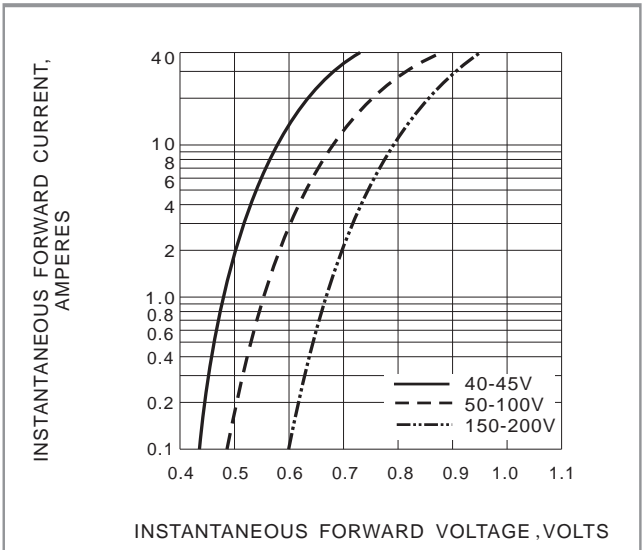


Fig.4-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC