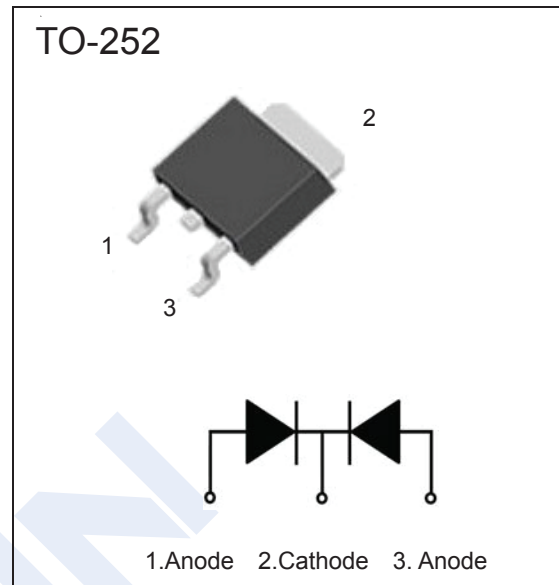


Schottky Barrier Rectifier

MBRD1040CT ~ MBRD10200CT

■ Features

- Low power loss,high efficiency.
High surge capacity
- For use in low voltage,high frequency inverters,
free wheeling,and polarity protection applications.
- Metal silicon junction,majority carrier conduction.
- High current capability,low forward voltage drop.
- Guard ring for over voltage protection.



■ Absolute Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	MBRD 1040 CT	MBRD 1045 CT	MBRD 1050 CT	MBRD 1060 CT	MBRD 1080 CT	MBRD 1090 CT	MBRD 10100 CT	MBRD 10150 CT	MBRD 10200 CT	Unit	
Maximum repetitive 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_{DC}	40	45	50	60	80	90	100	150	200		
Maximum average forward rectified 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	$T_J = 25^\circ\text{C}$					0.1					mA
		$T_J = 125^\circ\text{C}$					20					
Typical thermal resistance	$R_{\theta JC}$	1.4									°C/W	
Junction Temperature	T_j	150					175					°C
Storage Temperature	T_{stg}	-55 to +150					-65 to +175					

Schottky Barrier Rectifier

MBRD1040CT ~ MBRD10200CT

■ Typical Characteristics

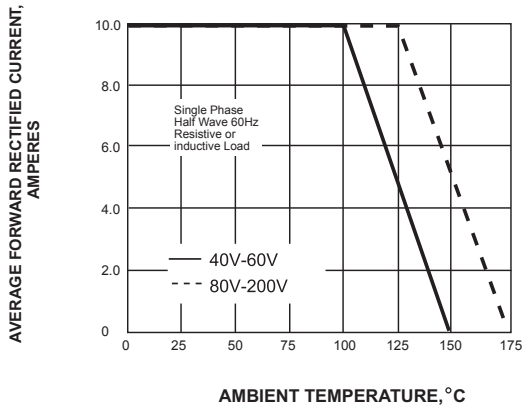


Fig.1 FORWARD CURRENT ERATING CURVE

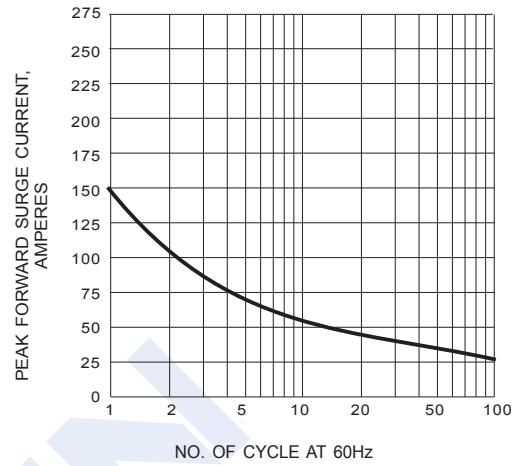


Fig.2 MAXIMUM NON-REPETITIVE SURGE CURRENT

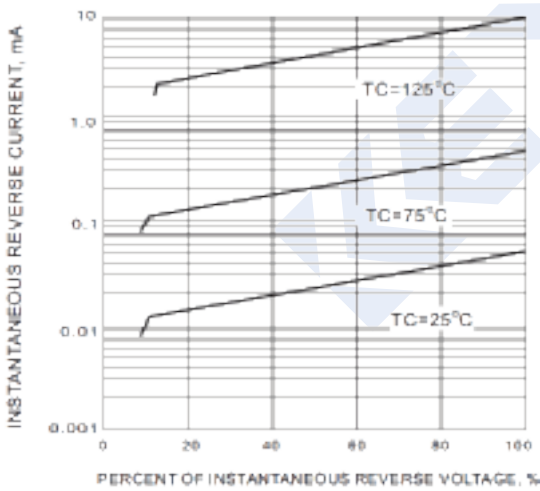


Fig.3 TYPICAL REVERSE CHARACTERISTIC

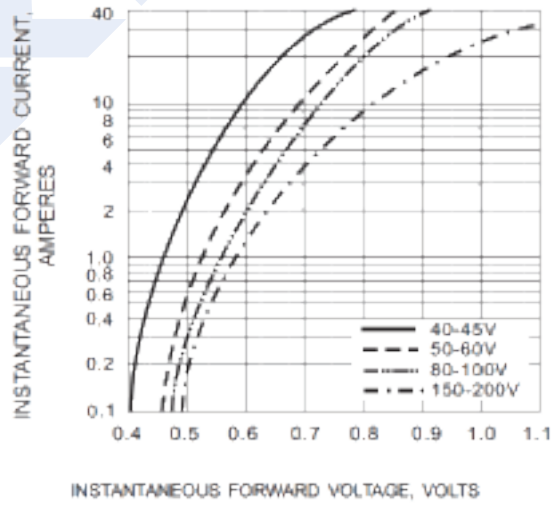


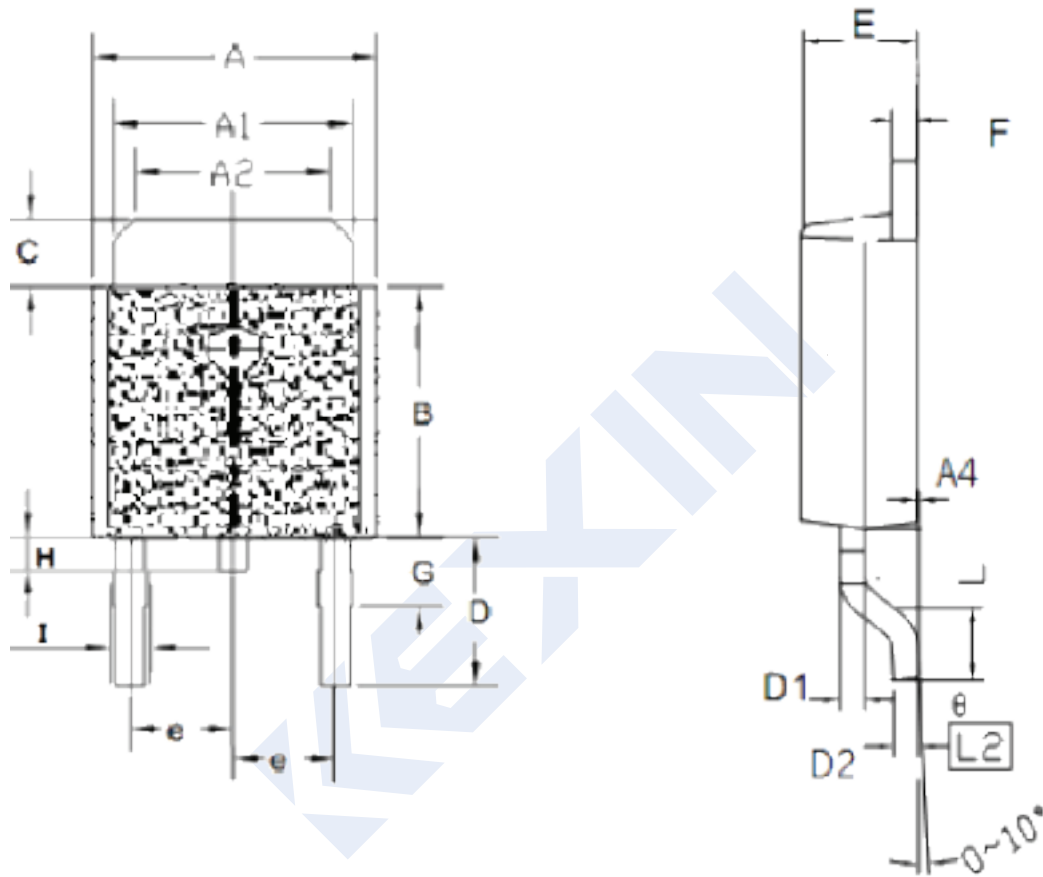
Fig.4 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

Schottky Barrier Rectifier

MBRD1040CT ~ MBRD10200CT

■ Package Dimension

TO-252



UNIT : mm

Symbol	Min	Max	Symbol	Min	Max
A	6.40	6.60	D	2.90	3.10
A1	5.20	5.40	D1	0.45	0.55
A2	4.40	4.60	D2	0.45	0.55
A3	4.40	4.60	e	2.30	
A4	0.00	0.15	E	2.20	2.40
A5	4.65	4.95	F	0.49	0.59
B	6.00	6.20	G	1.70	
B1	1.57	1.77	L	1.40	1.60
C	0.90	0.96	θ	0.00	10.00
I	0.60	0.90	H	0.49	0.52