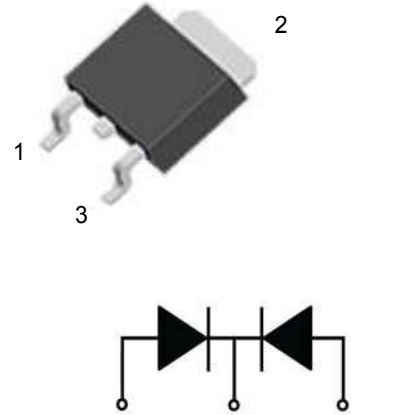


30A SCHOTTKY BARRIER RECTIFIER



TO-252



1. Anode 2. Cathode 3. Anode

MBRD30100CT

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 (Ta=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	100	V
Maximum RMS Voltage	V_{RMS}	70	V
Maximum DC Blocking Voltage	$V_{R(DC)}$	100	V
Maximum Average Forward Current	$I_{F(AV)}$	30	A
Peak Forward Surge Current: 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	350	A
Maximum Forward Voltage @IF=15A Tj=25°C	V_F	0.85	V
Maximum DC Reverse Current	Tj=25°C	0.1	mA
	Tj=125°C	20	mA
Maximum Operating Junction Temperature	T_j	150	°C
Storage Temperature	T_{stg}	-40~+150	°C

Typical Characteristics

RATING AND CHARACTERISTIC CURVES

FIG. 1- FORWARD CURRENT DERATING CURVE

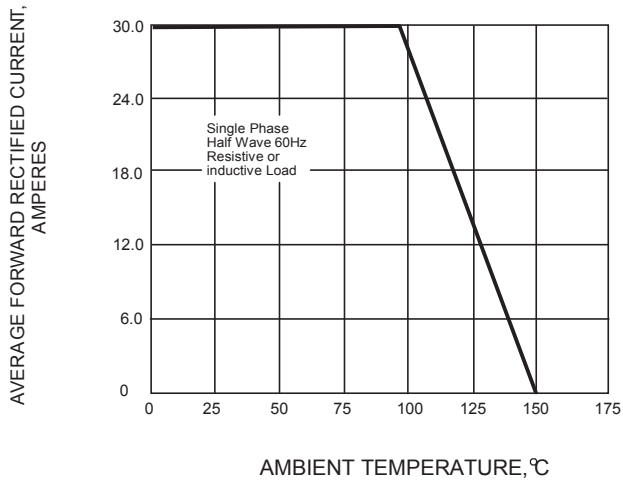


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

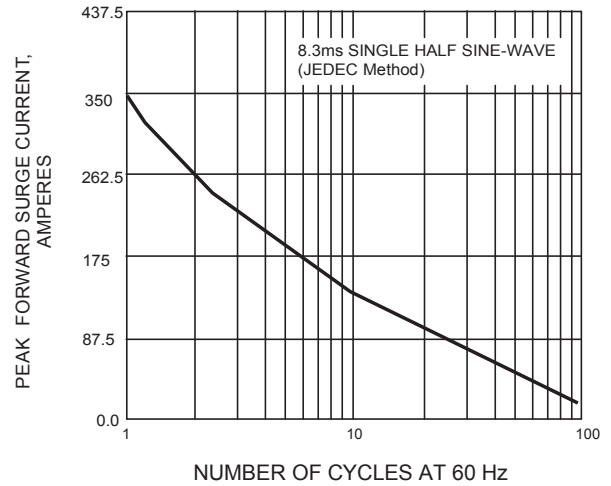


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

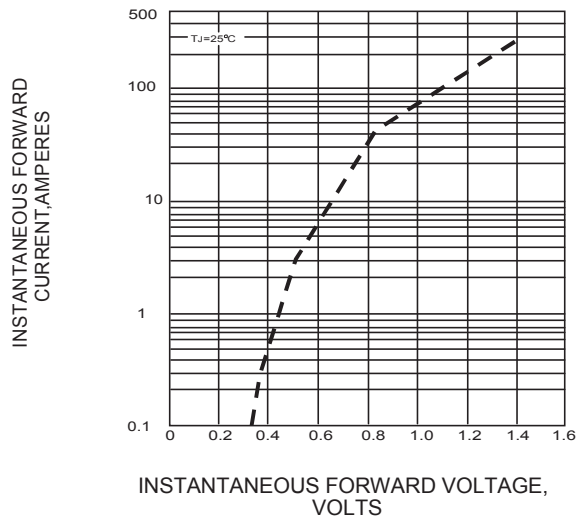
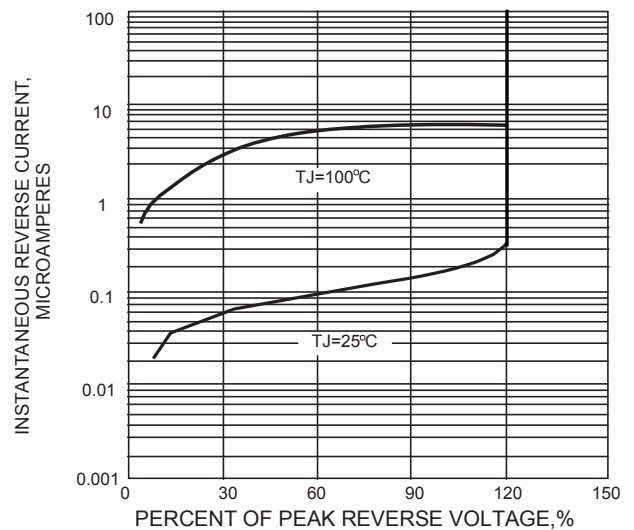


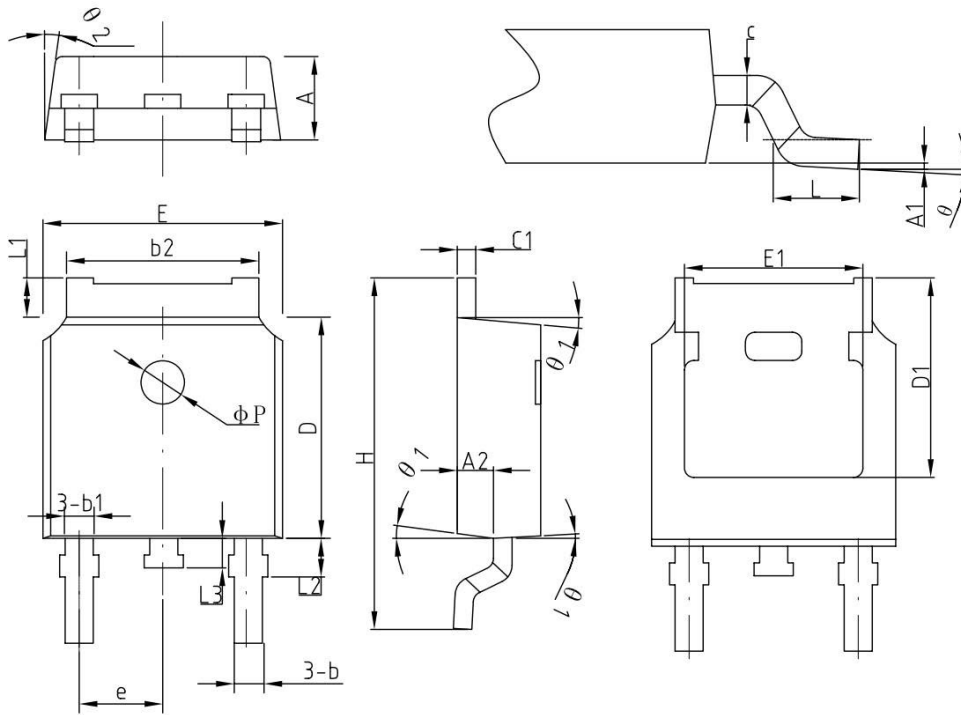
FIG. 4-TYPICAL REVERSE CHARACTERISTICS



Package Dimension

TO-252

Unit: mm



COMMON DIMENSIONS
(UNITS OF MEASURE=MILLIMETER)

SYMBOL	MIN	NOM	MAX
A	2.2	2.30	2.38
A1	0	-	0.10
A2	0.90	1.01	1.10
b	0.71	0.76	0.86
b1		0.76	
b2	5.13	5.33	5.46
c	0.47	0.50	0.60
c1	0.47	0.50	0.60
D	6.0	6.10	6.20
D1	-	5.30	-
E	6.50	6.60	6.70
E1	-	4.80	-
e	2.286BSC		
H	9.70	10.10	10.40
L	1.40	1.50	1.70
L1	0.90	-	1.25
L2		1.05	
L3		0.8	
φP		1.2	
θ	0°	-	8°
θ 1	5°	7°	9°
θ 2	5°	7°	9°