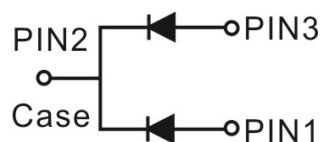
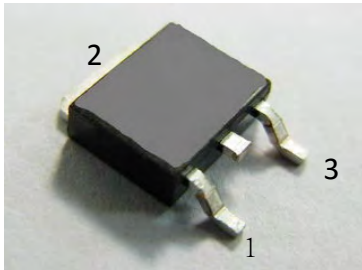


SCHOTTKY BARRIER RECTIFIER

**MBR3045D
TO-252**



Features

- Low forward voltage drop
- Low power losses
- High efficiency operation
- Lead Free Finish, RoHS Compliant

Applications

- DC/DC Converters
- AC/DC Adaptors
- Switching Power Supplies
- Freewheeling Diodes

Maximum ratings and electrical characteristics (T_J = 25°C unless otherwise noted)

Parameter		Symbol	Limit		Unit
Maximum repetitive peak reverse voltage		VRRM	45		V
Maximum average forward rectified current	per device	IF(AV)	30		A
	per diode		15		
Peak forward surge current 8.3 ms single half sine- wave superimposed on rated load per diode		IFSM	300		A
Operating junction and storage temperature range		TJ, TSTG	-55 to +150		°C
Typical thermal resistance per leg	TO-252	RθJC	6		°C/W
Instantaneous forward voltage per diode			TYP.	MAX.	V
	IF=2A	TJ=25°C	0.48	0.53	
	IF=2A	TJ=125°C	0.41	-	
	IF=5A	TJ=25°C	0.63	0.69	
	IF=5A	TJ=125°C	0.58	-	
Instantaneous reverse current per diode at rated reverse voltage	TJ=25°C	IR(2)	8	50	µA
	TJ=125°C		5	-	mA

Notes:

(1) Pulse test: 300 µs pulse width, 1 % duty cycle

(2) Pulse test: Pulse width ≦ 40 ms

RATINGS AND CHARACTERISTICS CURVES (TA = 25 °C unless otherwise noted)

FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

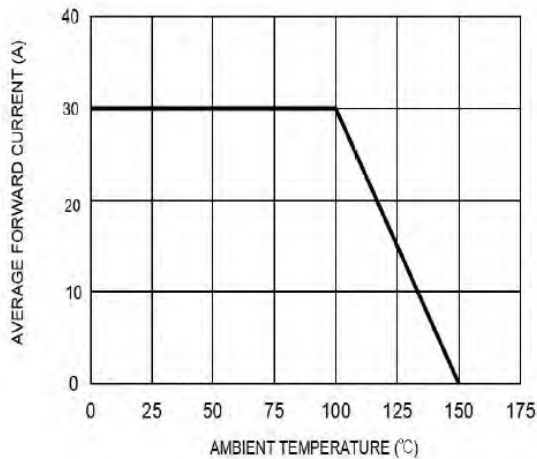


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

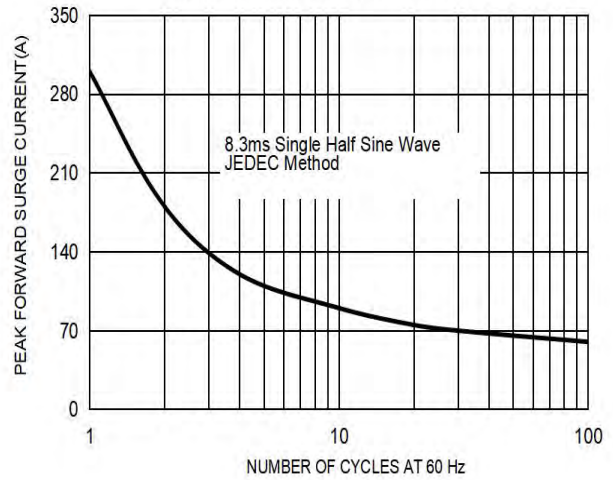


FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

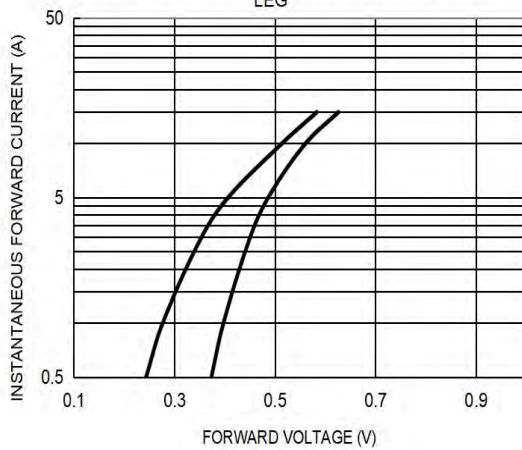
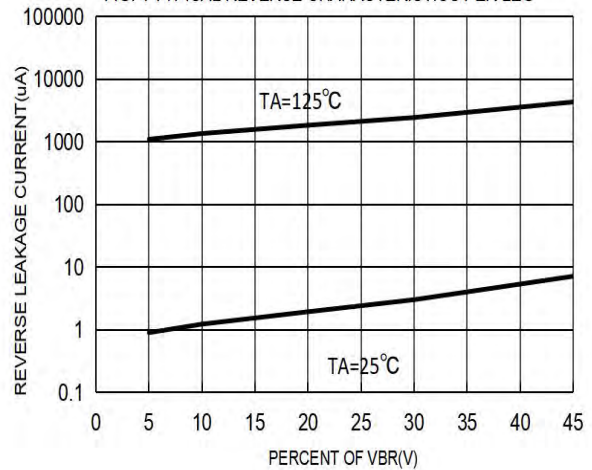


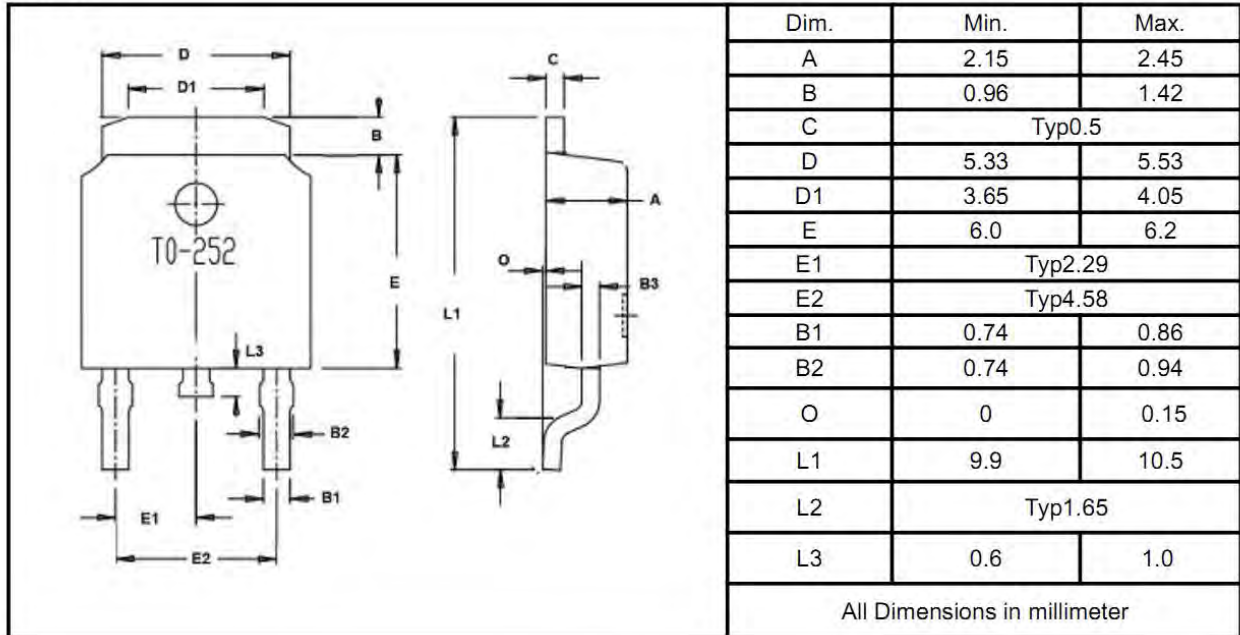
FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG



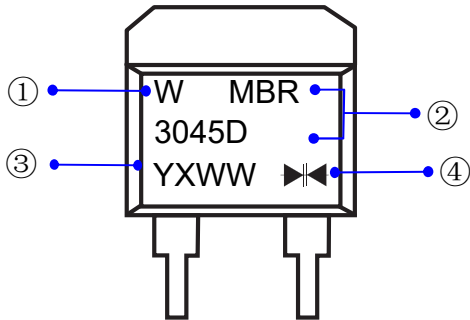
PACKAGE OUTLINE DIMENSIONS

Note:unit mm

TO-252

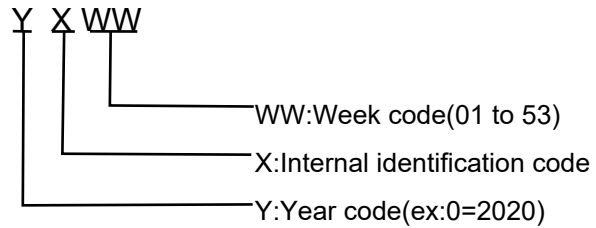



Marking Information



①W : Company's trademark
②Product model : MBR3045D

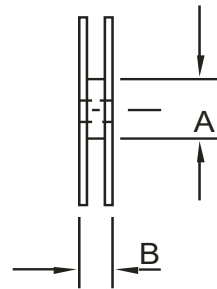
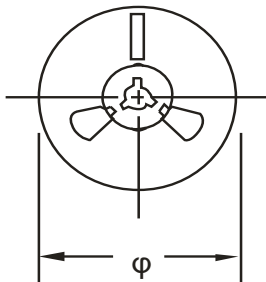
③PDC information:



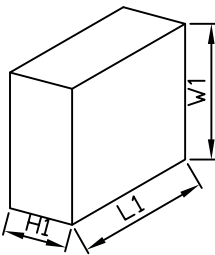
④  Double wafer

Packaging Information

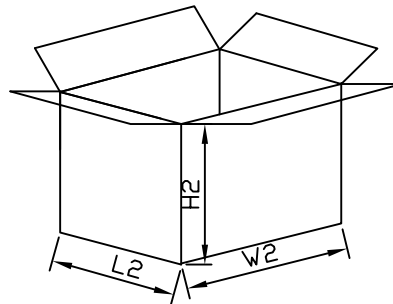
1.Reel Dimensions



2. Inside Box



3. Outside Box



Packaging Information

NO	UNIT	Reel Dimensions			Inside Box			Outside Box		
		φ	A	B	L1	W1	H1	L2	W2	H2
Size	mm	330	100	15	340	335	45	370	360	270
QTY	PCS	Smallest package,2500PCS/reel			5,000PCS,2 reel in total			25,000PCS/carton,5boxes in total		
Note	Tolerance ≤20mm,±3mm; 21-100mm,±5mm; 101-500mm,±10mm									