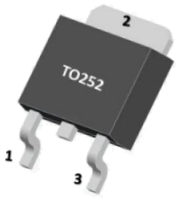
■ APPLICATIONS

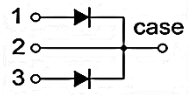
The MBR3045CS meet the ROHS and Green Product requirement with full function reliability approved.



■ FEATURE

* Low Power Loss,High Efficiency
*Guard Ring Die Construction for Transient Protection
* High Current Capability and Low Forward Voltage Drop

1. ANODE
2. CATHODE
3. ANODE



■ ABSOLUTE MAXIMUM RATINGS(TA=25°C, unless otherwise specified.)

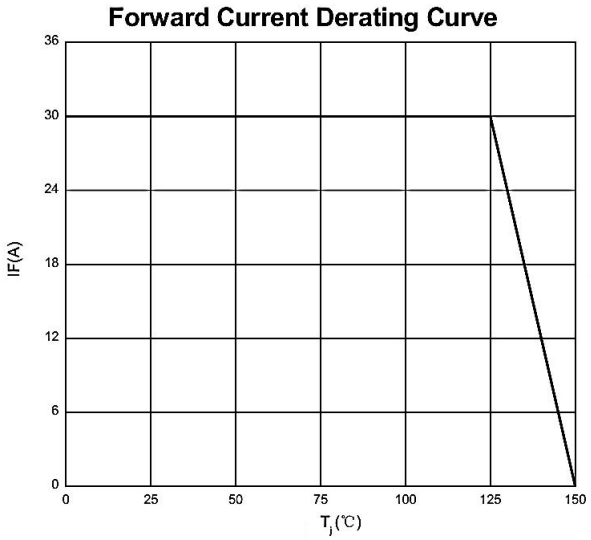
SYMBOL	PARAMETER		VALUE	UNIT
VRRM	Peak repetitive reverse voltage		45	V
VRWM	Working peak reverse voltage			
VR	DC blocking voltage			
VR(RMS)	RMS reverse voltage		31.5	V
IO	Average rectified output current		30(15*2)	A
IFSM	Non-Repetitive peak forward surge current (8.3ms half sine wave)		200*2	A
RΘJc	Thermal resistance from junction to case ,Tc=25℃	TO-252	2.0	℃/W
		TO-220F	3.0	
RΘJA	Thermal resistance from junction to ambient	TO-252	62.5	℃/W
		TO-220F	62.5	
Tj	Junction temperature		150	℃
Tstg	Storage temperature		-55~+150	℃

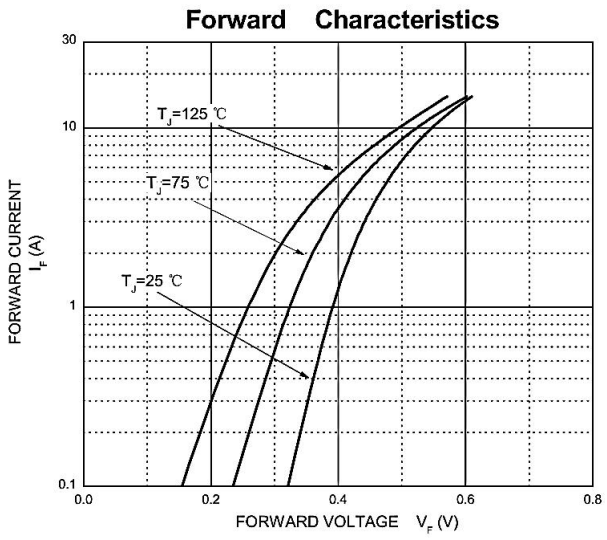
Notes:Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.

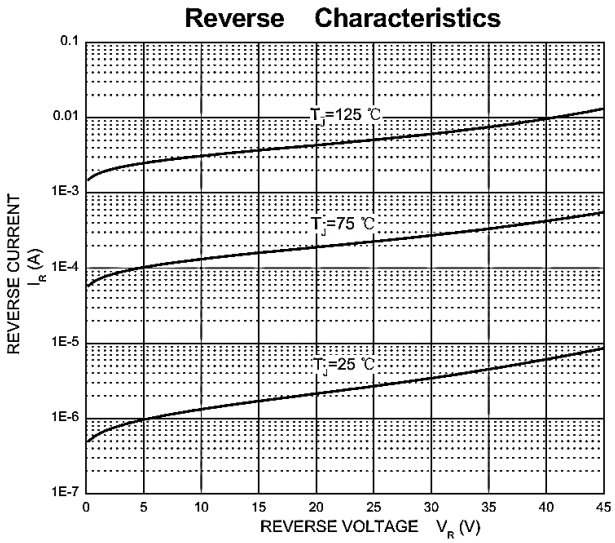
■ ELECTRICAL CHARACTERISTICS (TA=25°C, unless otherwise specified)

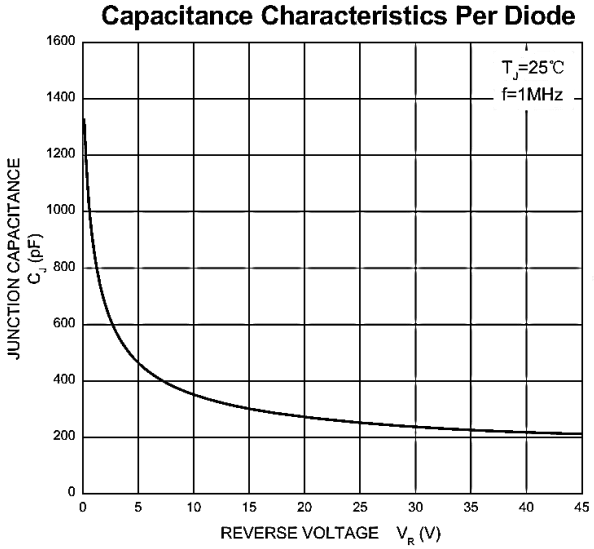
PARAMETER	SYMBOL	TEST CONDITIONS		MIN	TYP	MAX	UNIT
Reverse voltage	V(BR)	IR=0.2mA		45			V
Reverse current	IR	VR=45V	Tj =25℃			200	uA
			Tj =125℃		23		mA
Forward voltage	VF	IF=10A	Tj =25℃			0.7	V
			Tj =125℃		0.37		V
		IF=15A	Tj =25℃			0.80	V
			Tj =125℃		0.44		V
Pulse test: pulse width ≤300μs, duty cycle≤ 2.0%.							

■ TYPICAL CHARACTERISTICS

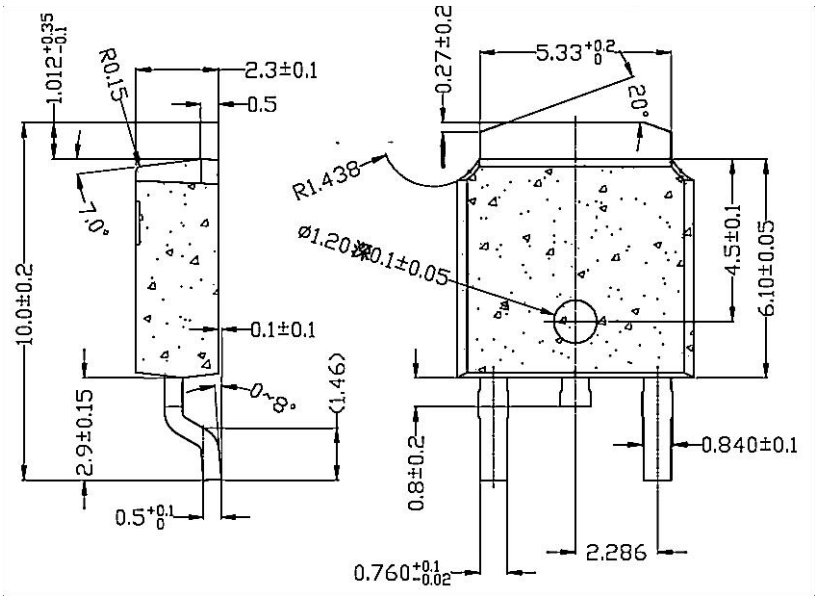


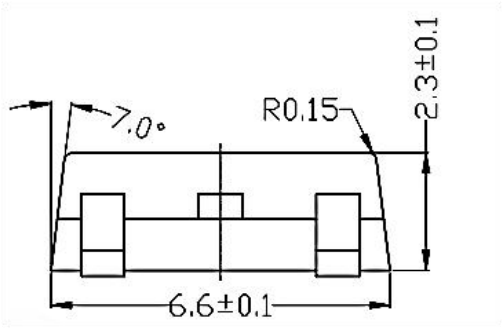






■ TO - 252 Package Outline Dimensions





■ TO - 252 Packing Information

Package version	Reel dimensions Φ×H (mm)	Per Reel (pcs)	Reels per box	Inner box dimensions L×W×H(mm)	Outer box (pcs)	Outer box dimensions L×W×H (mm)
TO-252	Φ330*20	2500	2	360*340*50	25000	375*375*280