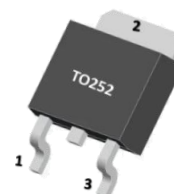


■ DESCRIPTION

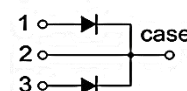
The MBR2045CS meet the ROHS and Green Product requirement with full function reliability approved.

■ 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		45	V
VR	DC blocking voltage		45	V
VR(RMS)	RMS reverse voltage		31.5	V
IO	Averagerectifiedoutputcurrent		20 (10*2)	A
IFSM	Non-Repetitive peak forward surge current(8.3ms half sine wave)		150*2	A
Tj	Junction temperature		150	°C
Tstg	Storage temperature		-55~+150	°C
RθJA	Thermal Resistance fromJunction to Ambient	TO-252	100	°C/W
		TO-220F	58	
RθJc	Thermal Resistance From Junction To Case	TO-252	5	°C/W
		TO-220F	3	

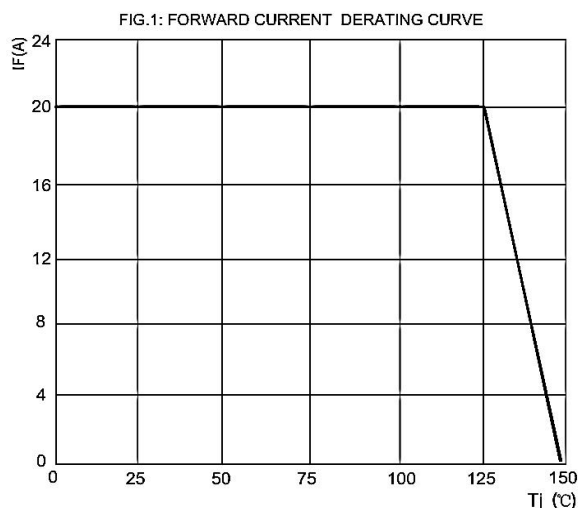
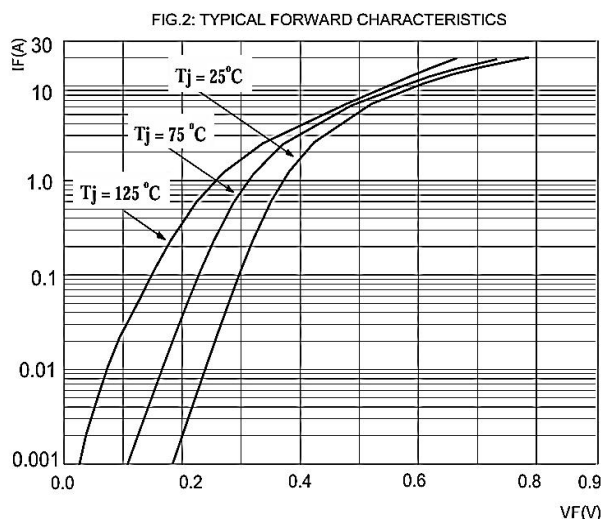
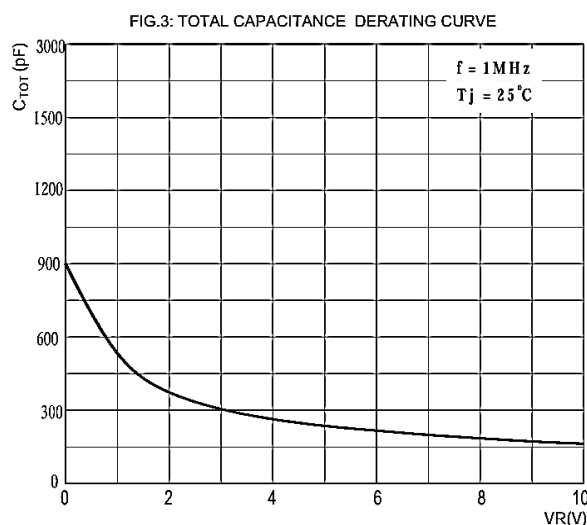
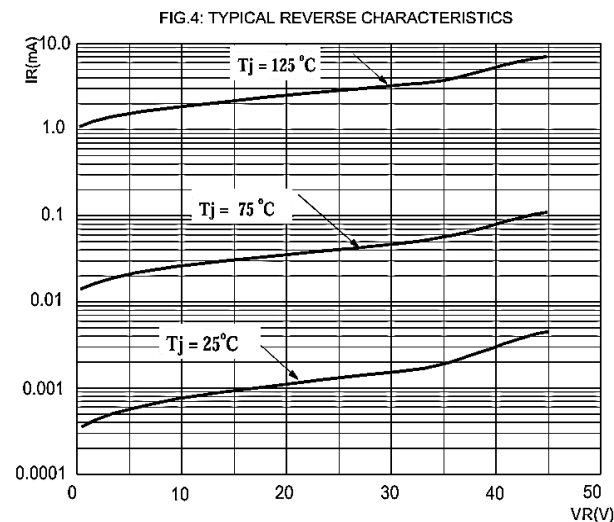
Notes: Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.

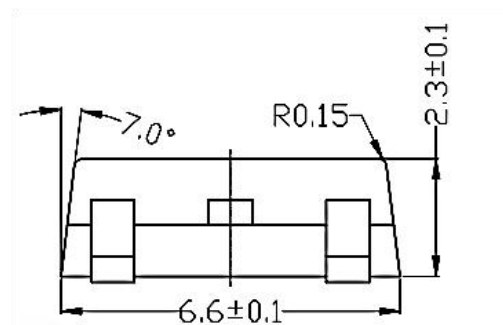
■ ELECTRICAL CHARACTERISTICS (TA=25°C, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Reverse voltage	V(BR)	IR=0.2mA	45			V
Reverse current	IR	VR=45V			40	μA
				10		mA
Forward voltage	VF1	IF=5A			0.65	V
				0.44		V
	VF2	IF=10A			0.7	V
				0.56		V

*Pulse test: pulse width ≤300μs, duty cycle≤ 2.0%.

■ TYPICAL CHARACTERISTICS





Package version	Reel dimensions $\phi \times H$ (mm)	Per Reel (pcs)	Reels per box	Inner box dimensions $L \times W \times H$ (mm)	Outer box (pcs)	Outer box dimensions $L \times W \times H$ (mm)
T0-252	$\phi 330 \times 20$	2500	2	360*340*50	25000	375*375*280