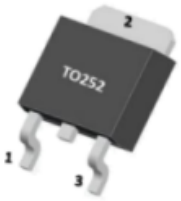
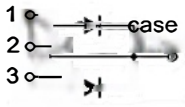
DESCRIPTION

The MBR30150CS meet the ROHS and Green Product requirement with full function reliability approved.



1. ANODE
2. CATHODE
3. ANODE



FEATURE

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

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

SYMBOL	PARAMETER		VALUE	UNIT
VRRM	Peak repetitive reverse voltage		150	V
VRWM	Working peak reverse voltage			
VR	DC blocking voltage			
VR(RMS)	RMS reverse voltage		105	V
IO	Average rectified output current		30(15*2)	A
IFSM	Non-Repetitive peak forward surge current (8.3ms half sine wave)		300	A
RΘJc	Thermal resistance from junction to case ,Tc=25℃	TO-220F	3.0	℃/W
RΘJA	Thermal resistance from junction to ambient	TO-220F	62.5	℃/W
Tj	Junction temperature		175	℃
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	$V_{(BR)}$	I_R=0.2mA		155			V
Reverse current	I_R	V_R=150V	Tj=25℃			100	μA
Forward voltage	V_F	I_F=5A	Tj=25℃			0.9	V
			Tj=125℃		0.6		V
		I_F=15A	Tj=25℃			1.0	V
			Tj=125℃		0.78		V

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

■ TYPICAL CHARACTERISTICS

FIG.1: FORWARD CURRENT DERATING CURVE

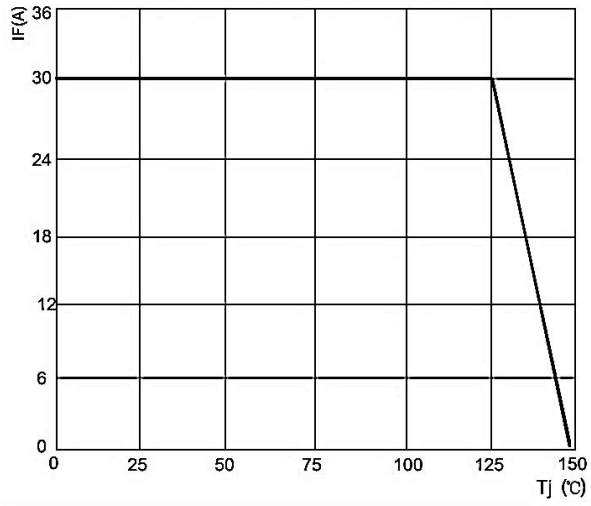


FIG.2: TYPICAL FORWARD CHARACTERISTICS

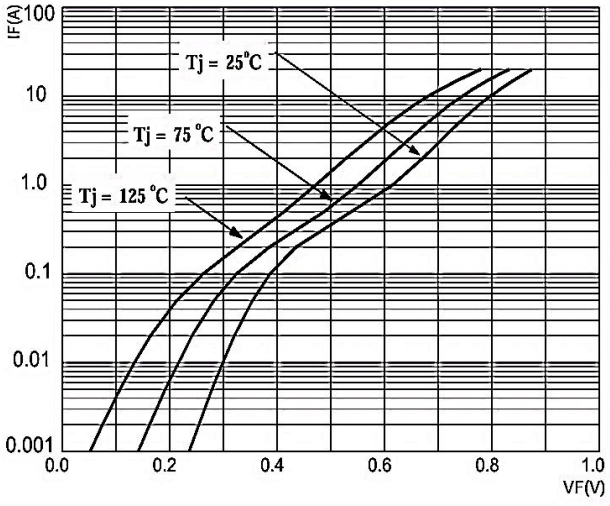


FIG.3: TOTAL CAPACITANCE DERATING CURVE

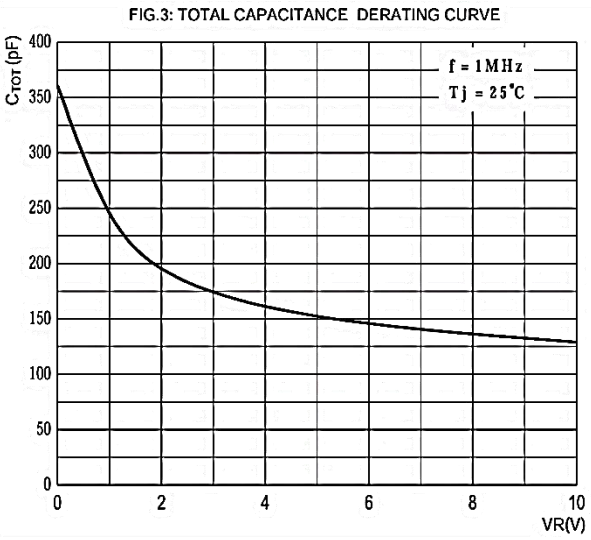
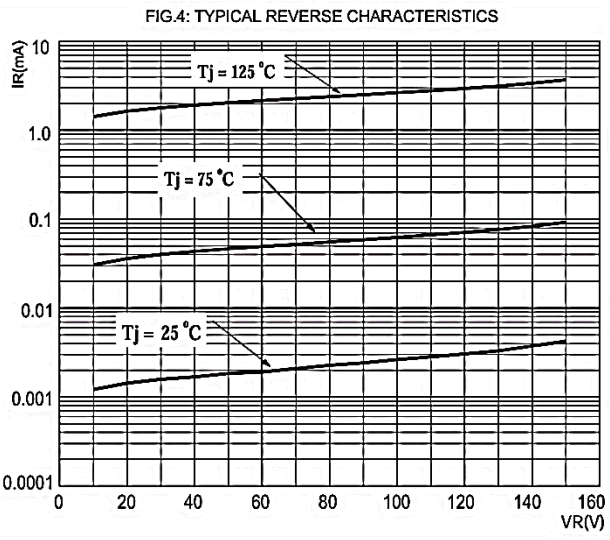
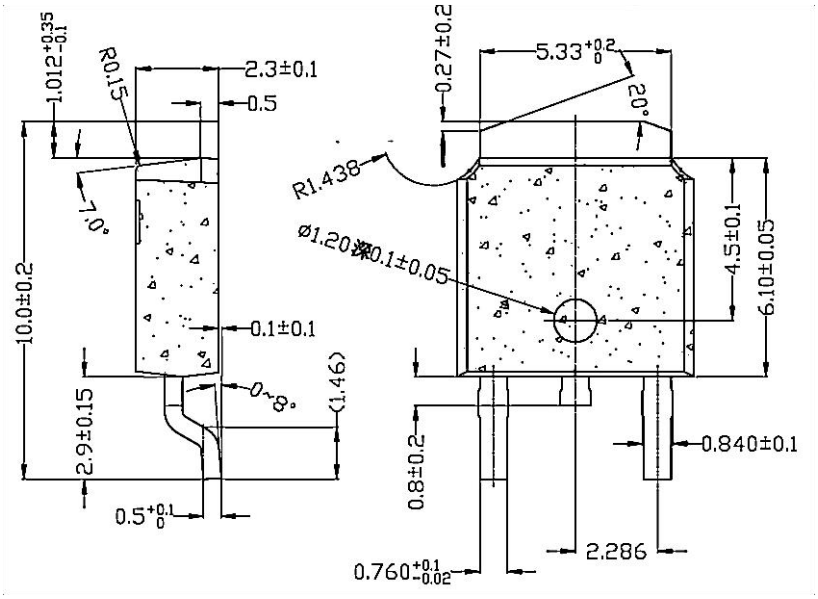
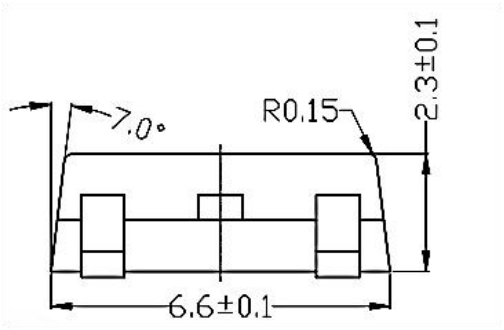


FIG.4: TYPICAL REVERSE CHARACTERISTICS



■ 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