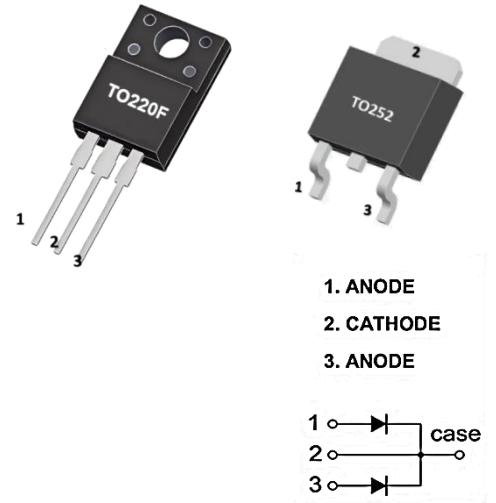


### DESCRIPTION

The MBR(D/F)30100CS 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



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

SYMBOL	PARAMETER		VALUE	UNIT
VRRM	Peak repetitive reverse voltage		100	V
VRWM	Working peak reverse voltage			V
VR	DC blocking voltage			V
VR(RMS)	RMS reverse voltage		70	V
IO	Average forward rectified output current		30(15*2)	A
IFSM	Non-Repetitive Peak Forward Surge Current 8.3ms Single Half-Sine-Wave		200*2	A
Tj	Junction temperature		175	°C
Tstg	Storage temperature		-55~+150	°C
RθJA	Thermal Resistance from Junction to Ambient	TO-252	62.5	°C/W
			62.5	
RθJC	Thermal Resistance From Junction To Case	TO-220F	3	°C/W
			2	

Note: 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	100			V
Instantaneous Reverse Current	IR	VR=100V	Tj=25°C		100	μA
			Tj=125°C		5.0	mA
Instantaneous Forward Voltage Drop	VF	IF=5A	Tj=25°C		0.85	V
			Tj=125°C		0.64	V
		IF=15A	Tj=25°C		1.00	V
			Tj=125°C		0.70	V

Notes: Pulse Test: Pulse Width ≤ 300μs, Duty Cycle ≤ 2.0%

■ **TYPICAL CHARACTERISTICS**

