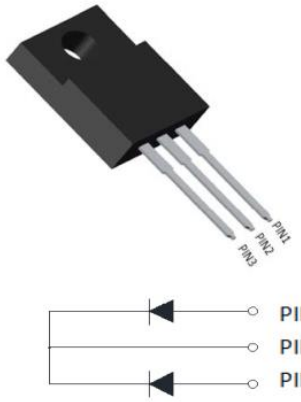
WSR4510FCT

SCHOTTKY BARRIER RECTIFIER

Features



- 10A Schottky barrier diode
- Schottky barrier rectifier
- Excellent high temperature stability
- Low forward voltage
- High forward surge capability
- High current capability

Mechanical Data

- Case: TO-220F molded plastic package

Maximum Ratings (Ta=25℃ Unless otherwise specified)

PARAMETER	SYMBOL	WSR4510FCT	UNIT
Repetitive Peak Reverse Voltage	V_{RRM}	45	V
Average Rectified Output Current @60Hz -sine wave, R- load, Ta=25℃	I_O	5(per leg)	A
		10(total device)	
Forward Surge Current (Non-repetitive) @ 60Hz Half-sine wave,1 cycle, Ta=25℃	I_{FSM}	100	A
Storage Temperature	Tstg	-55~+150	℃
Junction Temperature	Tj	-55 ~+150	℃

Electrical Characteristics(Ta=25℃ Unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	WSR4510FCT		UNIT
			Typ	Max	
Maximum instantaneous forward voltage drop per diode	V_F	I_F =5A(per leg)	0.55	0.6	V
Leakage Current	I_R	$V_R=V_{RRM}$, Tj=25℃	/	0.1	mA
		$V_R=V_{RRM}$, Tj=125℃	20	/	

Thermal Characteristics (Ta=25℃ Unless otherwise specified)

PARAMETER		SYMBOL	WSR4510FCT	UNIT
Thermal Resistance	Between Junction to Case	$R_{\theta J-C}$	4.0	℃/W

Typical Characteristics

FIG.1: FORWARD CURRENT DERATING CURVE

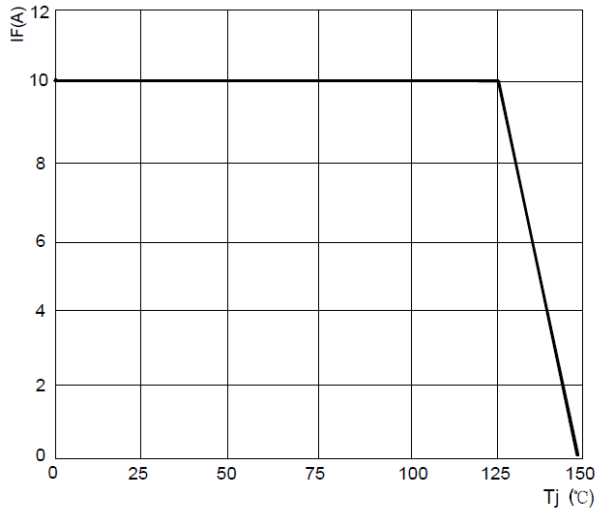


FIG.2: TYPICAL FORWARD CHARACTERISTICS

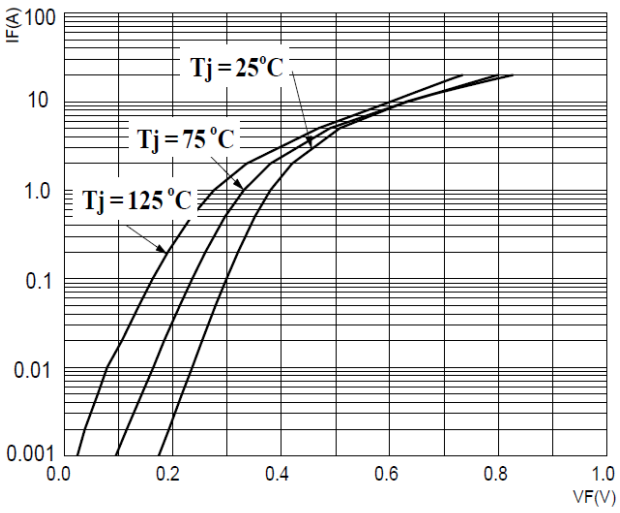
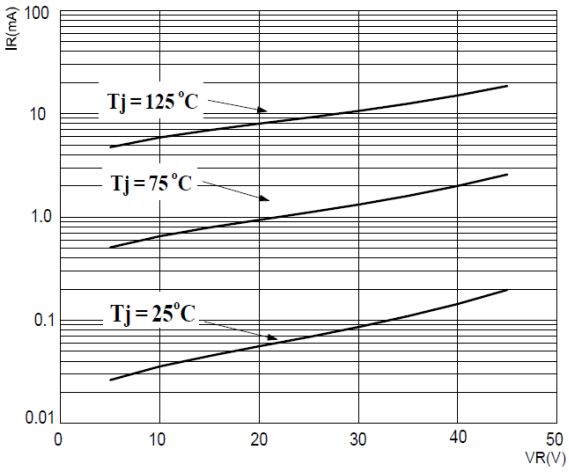
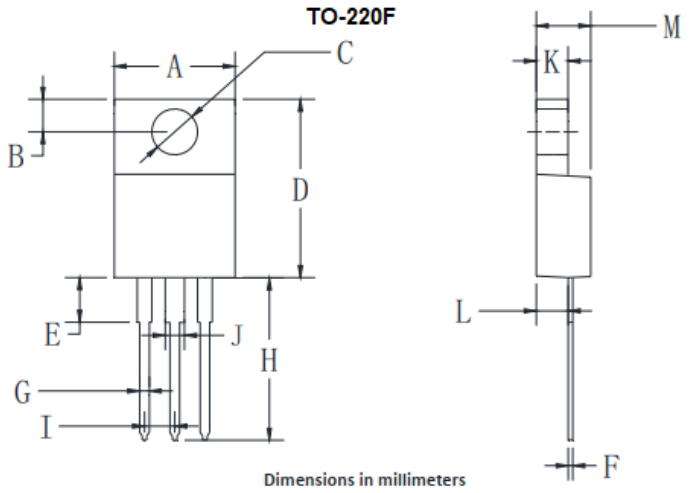


FIG.3: TYPICAL REVERSE CHARACTERISTICS



Outline Dimensions



TO-220F		
Dim	Min	Max
A	8.7	10.7
B	2.15	3.55
C	2.6	3.8
D	14.4	16.4
E	2.95	4.5
F	0.3	0.8
G	0.6	1
H	12.6	14.2
I	1.8	2.95
J	1.2	1.8
K	2.1	3.56
L	2.1	3.2
M	3.9	5.1

Marking Code

Part Number	**WSR4510FCT**
Marking Code	MBR1045FCT

Package Information

Quantity per tube: 50pcs

Contact Information

No.1001, Shiwan(7) Road, Pudong District, Shanghai, P.R.China.201207
Tel: 021-68969993 Fax: 86-21-50757680 Email: market@way-on.com
WAYON website: **http://www.way-on.com**
For additional information, please contact your local Sales Representative.

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Specifications are subject to change without notice.
The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.
Users should verify actual device performance in their specific applications.