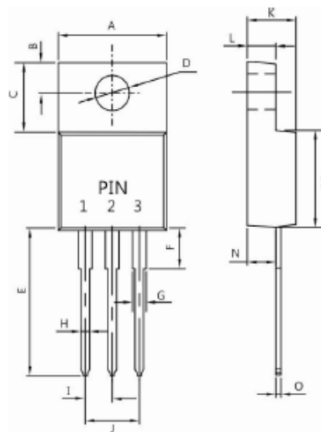




SCHOTTKY BARRIER RECTIFIERS	REVERSE VOLTAGE - 100 Volts FORWARD CURRENT - 30 Ampere																																													
<div>FEATURES</div> <ul style="list-style-type: none">• Metal of silicon rectifier, majority carrier conducton• Guard ring for transient protection• Low power loss, high efficiency• High current capability, low VF• High surge capacity• Plastic package has UL flammability classification 94V-0• For use in low voltage, high frequence inverters, free wheeling, and polarity protection applications	<div>ITO-220AB</div> <div></div> <table><tr><th>Dim.</th><th>Min.</th><th>Max.</th></tr><tr><td>A</td><td>----</td><td>10.50</td></tr><tr><td>B</td><td>2.60</td><td>3.00</td></tr><tr><td>C</td><td>6.30</td><td>6.70</td></tr><tr><td>D</td><td>2.90</td><td>3.50</td></tr><tr><td>E</td><td>13.10</td><td>13.90</td></tr><tr><td>F</td><td>----</td><td>4.00</td></tr><tr><td>G</td><td>1.11</td><td>1.45</td></tr><tr><td>H</td><td>0.40</td><td>0.80</td></tr><tr><td>I</td><td>5.00</td><td>5.40</td></tr><tr><td>J</td><td>4.30</td><td>4.70</td></tr><tr><td>K</td><td>2.90</td><td>3.30</td></tr><tr><td>L</td><td>8.20</td><td>9.00</td></tr><tr><td>M</td><td>2.50</td><td>2.80</td></tr><tr><td>N</td><td>0.40</td><td>0.80</td></tr></table> <div>All Dimensions in millimeter</div>	Dim.	Min.	Max.	A	----	10.50	B	2.60	3.00	C	6.30	6.70	D	2.90	3.50	E	13.10	13.90	F	----	4.00	G	1.11	1.45	H	0.40	0.80	I	5.00	5.40	J	4.30	4.70	K	2.90	3.30	L	8.20	9.00	M	2.50	2.80	N	0.40	0.80
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<div>MECHANICAL DATA</div> <ul style="list-style-type: none">• Case : ITO-220AB molded plastic• Polarity : As marked on the body• Weight : 0.06 ounces, 1.7 grams• Mounting position : Any																																														

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%

CHARACTERISTICS	SYMBOL	MBR30100FCT	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	100	V
Maximum RMS Voltage	V_{RMS}	70	V
Maximum DC Blocking Voltage	V_{DC}	100	V
Maximum Average Forward Rectified Current at $T_C=120^{\circ}\text{C}$ (See Fig.1)	I_{AV}	30	A
Peak Forward Surge current 8.3ms single half sine-wave super imposed on rated load (JEDEC METHOD)	I_{FSM}	250	A
Voltage Rate of Change (Rated VR)	dv/dt	10000	$dv/\mu s$
Maximum forward Voltage (Note 1) @ $I_F=15A$ $T_J=25^{\circ}\text{C}$	V_F	0.80	V
Maximum DC Reverse Current at Rated DC Blocking Voltage @ $T_J=25^{\circ}\text{C}$ @ $T_J=125^{\circ}\text{C}$	I_R	0.1 10	mA
Typical Junction Capacitance (Note 2)	C_J	250	pF
Typical Thermal Resistance (Note 3)	$R_{\theta JC}$	2.0	$^{\circ}\text{C}/\text{W}$
Operating Temperature Range	T_J	-55 to +150	$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	-55 to +175	$^{\circ}\text{C}$

NOTES : 1. 300us Pulse Width, 2% Duty Cycle.

2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

3. Thermal Resistance Junction to Case.

REV.0, 01.-Oct-2013

RATING AND CHARACTERISTIC CURVES MBR30100FCT

