

FrelTec

Mathildenstr. 10A
82319 Starnberg
Germany

Schottky Barrier Rectifier TO-220

TO-220

SPECIFICATION

683	MBR20__CT	T220	Y0F
Type	Type	Package	Packing
683: Schottky Barrier Rectifier	MBR20__CT	TO-220	Y0F: pack in Tube for 50 pc

All products according to RoHS (2015/863/EU)

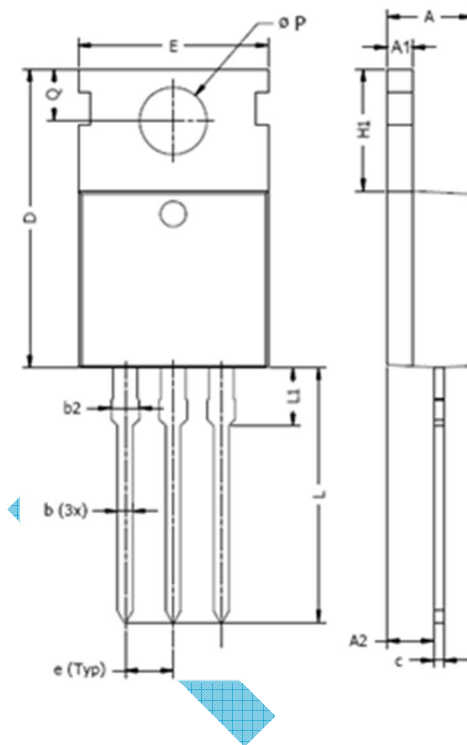
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TO-220

FrelTec
Schottky Barrier Rectifier

MBR20__CT

PACKAGE OUTLINE



DIM	MILLIMETERS	
	MIN	MAX
A	3,6	4,8
A1	1,14	1,4
A2	2,03	2,9
b	0,4	1
b2	1,2	1,78
c	0,36	0,6
D	14,22	15,88
e	2,29	2,79
E	9,65	10,67
H1	5,84	6,85
L	12,7	14,7
L1	2,7	3,3
ØP	3,5	4
Q	2,54	3,4

NOTE: Above package outline conforms to JEDEC TO-220AB

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Schottky Barrier Rectifier

Maximum Ratings & Thermal Characteristics

Ratings at 25°C ambient temperature unless otherwise specified

Parameter	Symbol	MBR	MBR	MBR	MBR	MBR	MBR	MBR	Unit
		2004 0CT	2004 5CT	2005 0CT	2006 0CT	2010 0CT	2015 0CT	2020 0CT	
Maximum repetitive peak reverse voltage	VRRM	40	45	50	60	100	150	200	V
Maximum RMS voltage	VRMS	28	31	35	42	70	105	140	V
Maximum DC blocking voltage	VDC	40	45	50	60	100	150	200	V
Maximum average forward rectified current	IF(AV)	20							A
Peak forward surge current 8,3 ms single half sine-wave	IFSM	150							A
Typical thermal resistance	R θ JC	1,5			3,5				°C/W
Operating junction and storage temperature range	Tj, TSTG	-55 --- +150							°C

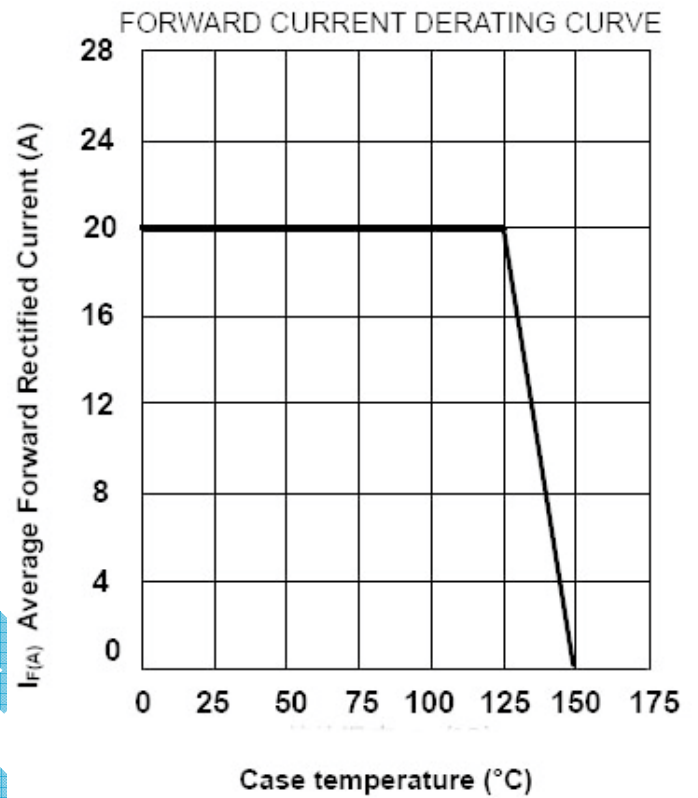
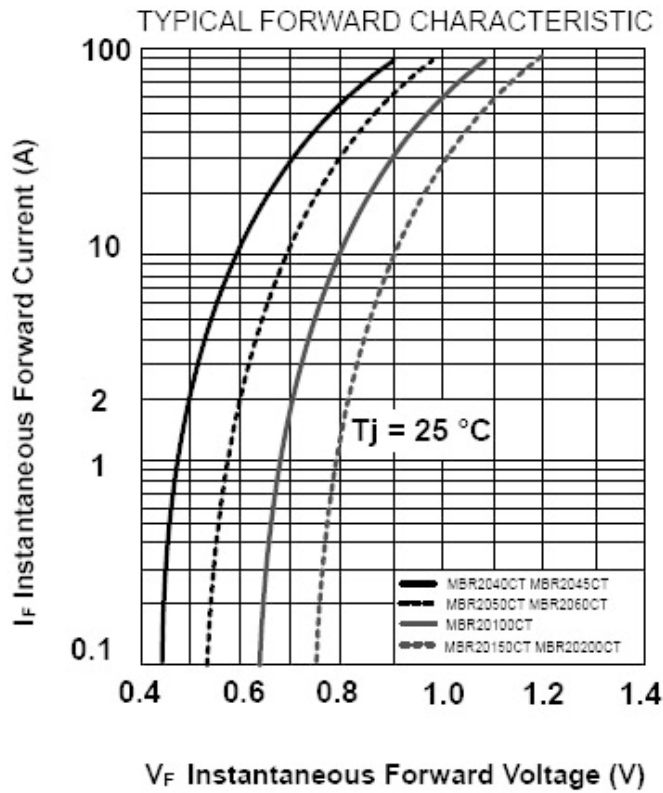
Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

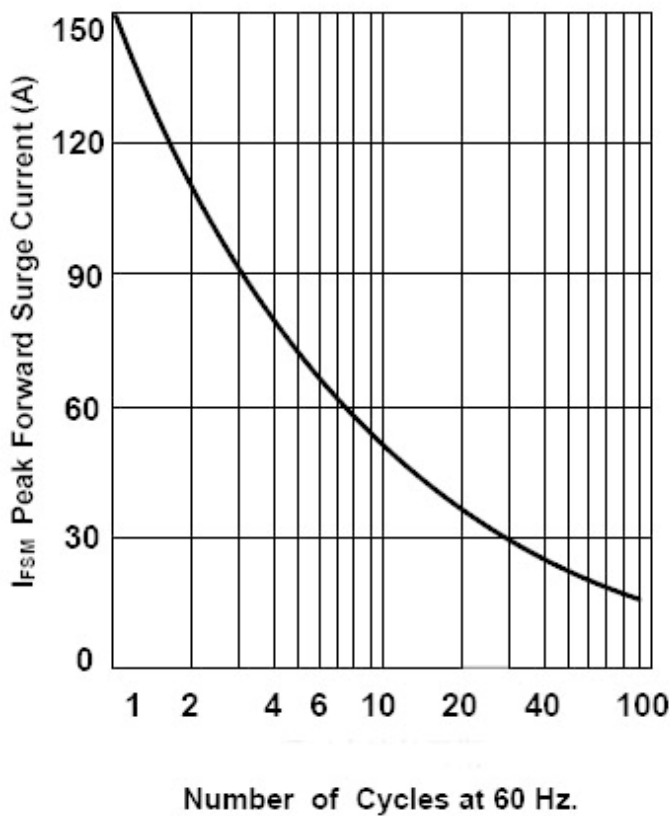
Parameter	Symbol	MBR	MBR	MBR	MBR	MBR	MBR	MBR	Unit
		2004 0CT	2004 5CT	2005 0CT	2006 0CT	2010 CT	2015 0CT	2020 0CT	
IF = 10,0A Maximum forward voltage	VF	0,63		0,75		0,85	0,95	0,99	V
Maximum reverse current TA= 25°C TA=100°C	IR	0,10 15		0,15 150					mA
VR = 4,0V, f = 1MHz Type junction capacitance	Cj	400		310					pF

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Rating and Characteristic Curves



MAXIMUM NON REPETITIVE PEAK FORWARD SURGE CURRENT

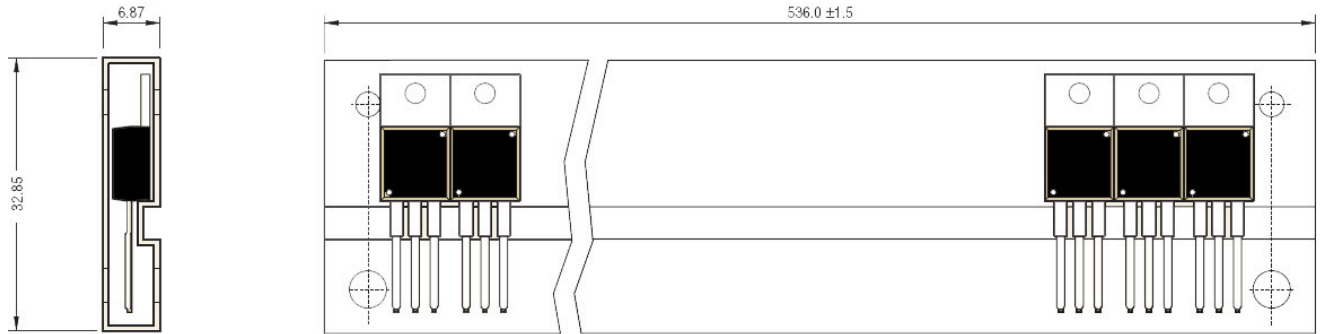


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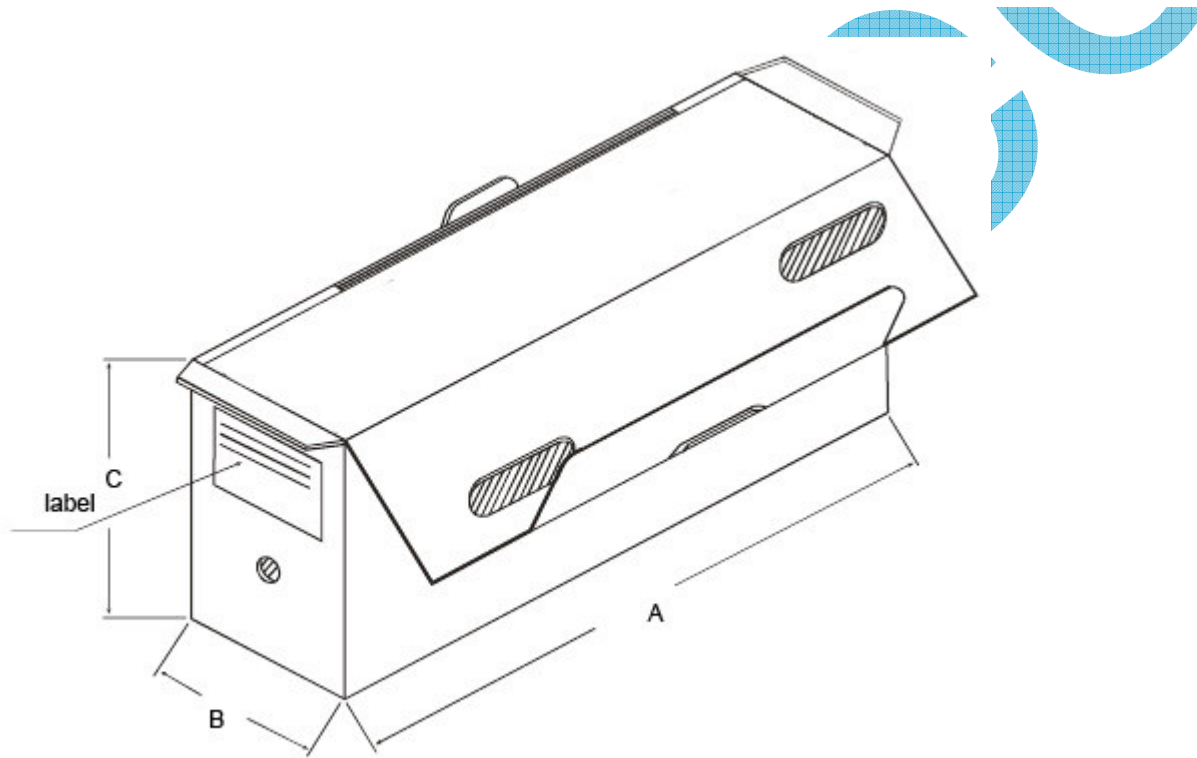
FrelTec Schottky Barrier Rectifier

SPECIFICATION

TUBE Package

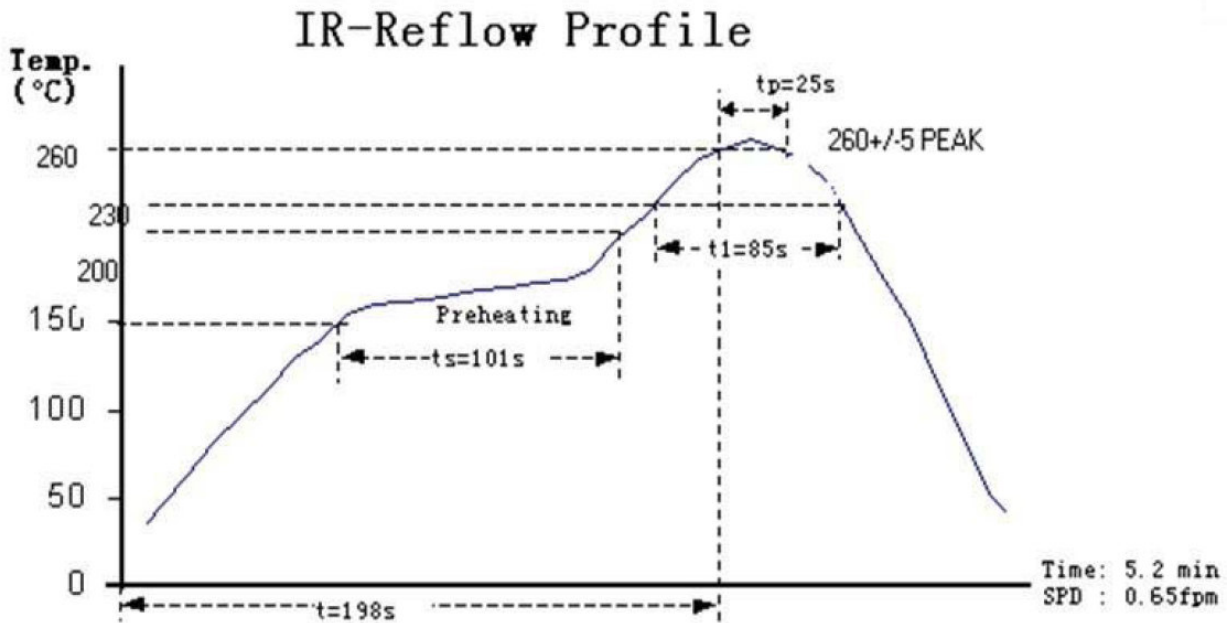


Qty: 50 Pcs/Tube



Packaging	Available Product Outlines	Dimension "A"	Dimension "B"	Dimension "C"	Quantity Box
TUBE PACK	TO220	540mm	170mm	78mm	2000 PCS

Lead Free Reflow Soldering Profile



Stock period

The performance of these products, including the solderability, is guaranteed for 12 month, provided that they remain packed as they were when delivered and stored at a temperature of 0-35°C and a relative humidity 35-75%RH

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