

# FrelTec

Mathildenstr. 10A  
82319 Starnberg  
Germany

## Schottky Barrier Rectifier TO-220AB

## TO-220

## SPECIFICATION

683	BRF10__CT	T220	Y0F
Type	Type	Package	Packing
683: Schottky Barrier Rectifier	MBRF10__CT	TO-220AB	Y0F: pack in Tube for 50 pc

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

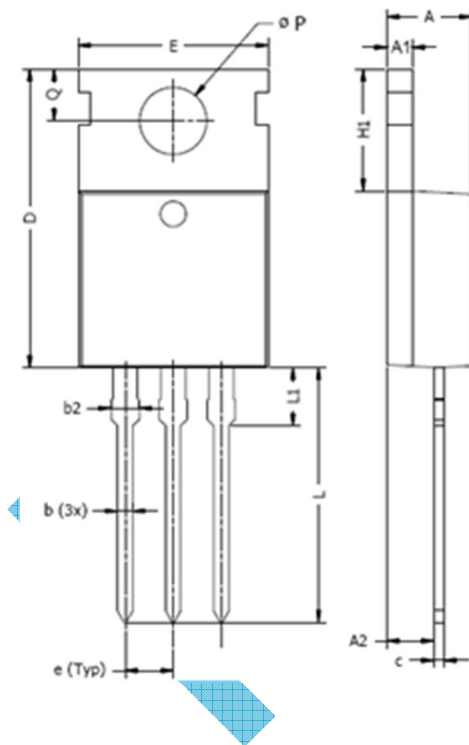
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TO-220

FrelTec  
Schottky Barrier Rectifier

MBRF10\_\_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

## TO-220

## Schottky Barrier Rectifier

## Maximum Ratings &amp; Thermal Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbols	MBRF	MBRF	MBRF	MBRF	MBRF	MBRF	MBRF	MBRF	Unit
		10040 CT	10045 CT	10050 CT	10060 CT	10080 CT	10100 CT	10150 CT	10200 CT	
Maximum repetitive peak reverse voltage	VRRM	40	45	50	60	80	100	150	200	V
Maximum RMS voltage	VRMS	28	31,5	35	42	56	70	105	140	V
Maximum DC blocking voltage	VDC	40	45	50	60	80	100	150	200	V
Maximum average forward rectified current	IF(AV)	10,0								A
Non-repetitive peak forward surge current 8,3 ms singlehalf sine-wave	IFSM	125								A
Current squared time $t \leq 8,3$ ms	I <sup>2</sup> t	65								A <sup>2</sup> S
@IF=5,0A Maximum forward voltage	VF	0,70		0,80		0,85		0,95	0,99	V
@VDC Maximum reverse current	IR	TA= 25°C			50			uA		
		TA= 100°C			10			mA		
Typical thermal resistance (Note 1)	R $\theta$ JC	4								°C /W
VR=4,0V, f=1MHz Type junction capacitance	Cj	300								pF
Operating junction and storage temperature rang	Tj, TSTG	-55 --- +150								°C

Note:

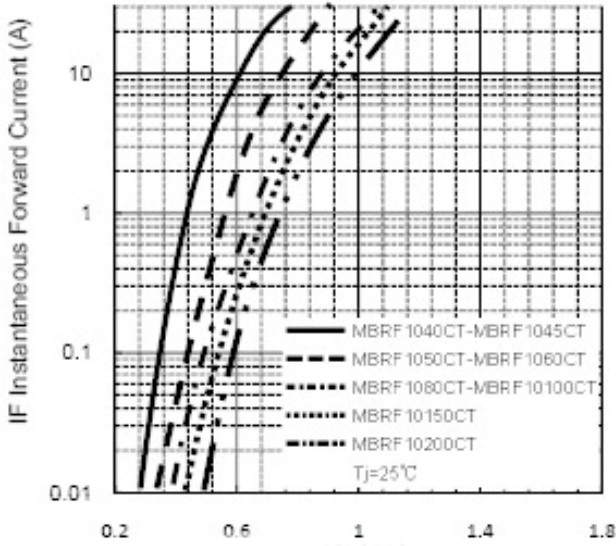
1) Thermal resistance from junction to case , PCB mounted.

# TO-220

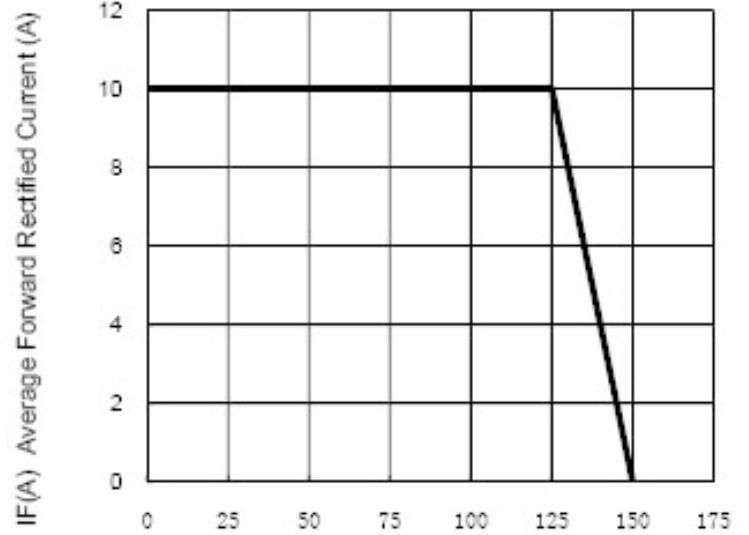
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## Rating and Characteristic Curves

TYPICAL FORWARD CHARACTERISTIC

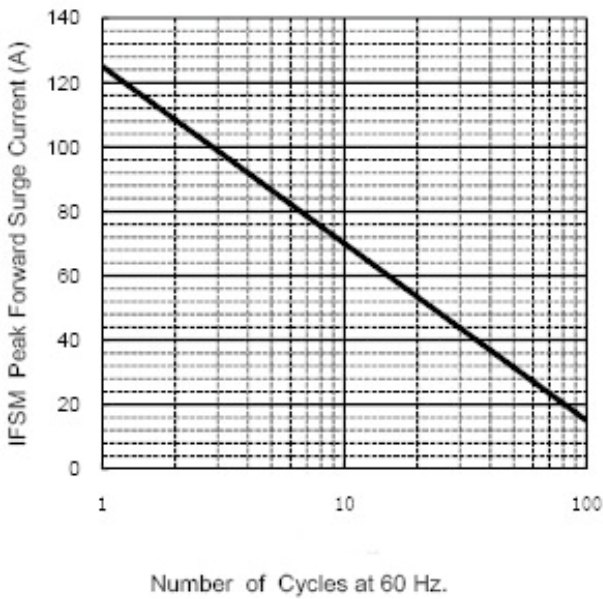


FORWARD CURRENT DERATING CURVE

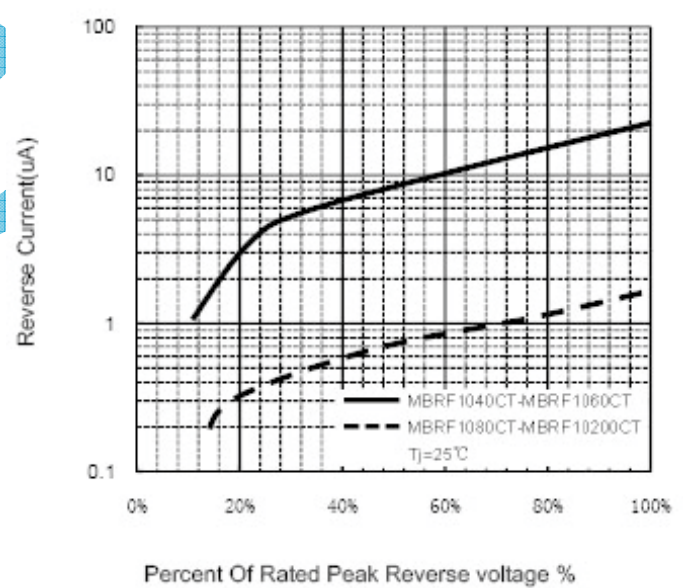


VF Instantaneous Forward Voltage (V)

MAXIMUM NON REPETITIVE  
PEAK FORWARD SURGE CURRENT



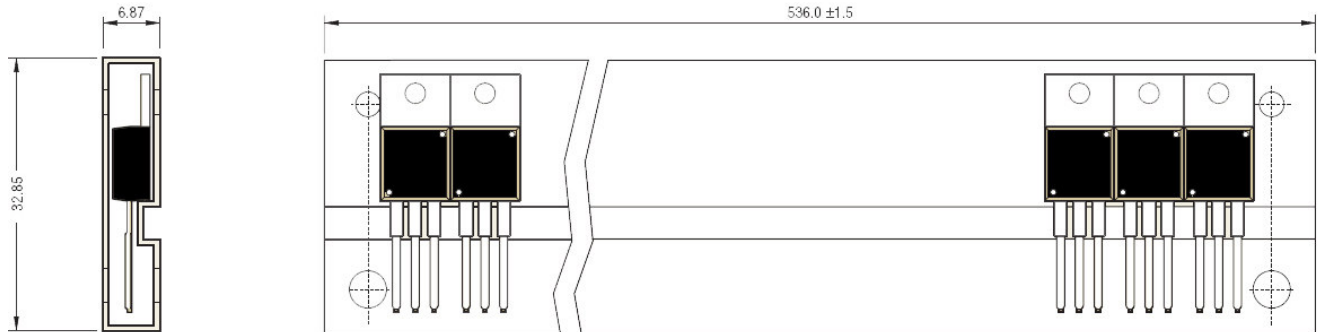
TC Case Temperature (°C)  
Typical Reverse Characteristics



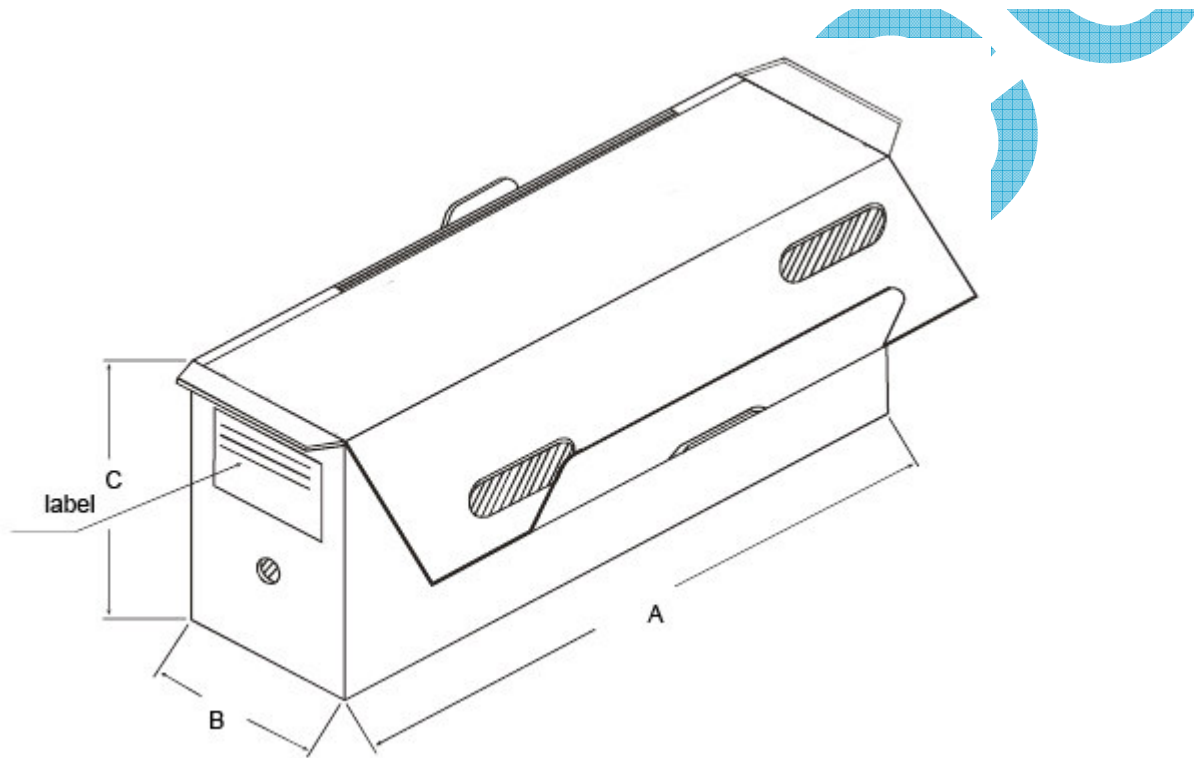
# TO-220

# FrelTec Schottky Barrier Rectifier

## SPECIFICATION *TUBE Package*

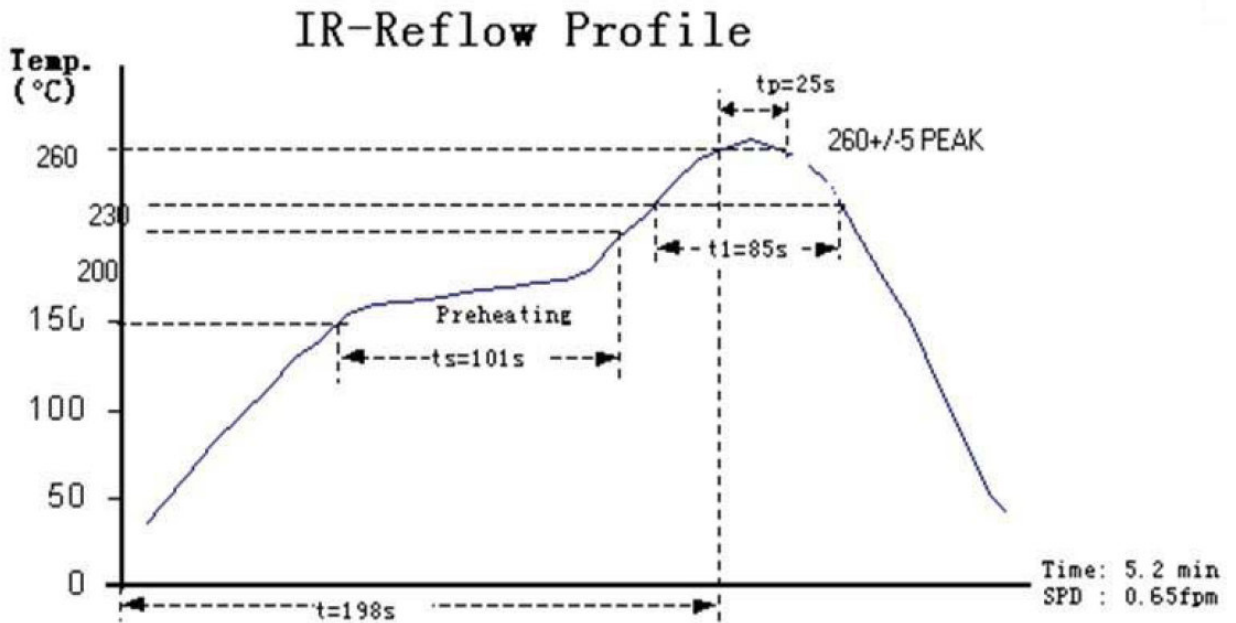


Qty: 50 Pcs/Tube



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 0-30°C and a relative humidity 35-75%RH



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