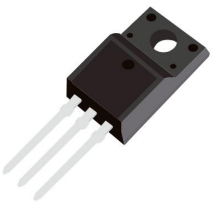
四川旭茂微科技有限公司
Sichuan Xu Mao Micro Technology Co.,Ltd

MBRF20L300CT

Schottky Diodes
Reverse Voltage-300v
Forward current-20A



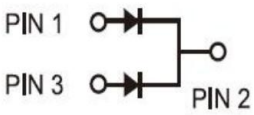
TO-220F

Features

Schottky chip
Low forward voltage drop
Ldeal for surface mounted applications
Low power loss, high efficiency
Plastic Case Material has UL Flammability

Mechanical Data

Package: TO-220F
Terminals:Tin Plated leads, solderable per
Mil-STD-750 Method 2026
Polarity: As marked
Molding compound meets UL 94 V-0 flammability rating,
ROHS-compliant



Maximum Ratings (Ta=25℃ Unless otherwise specified)

Type Number	SYMBOL	MBRF20L300CT	Umit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	300	V
Maximum RMS Voltage	V_{RMS}	210	V
Maximum DC Blocking Voltage	V_{DC}	300	V
Maximum Average Forward Rectified Current	$IO_{(AV)}$	20.0	A
Peak Forward Surge Current 8.3ms Single half-sine-wave superimposed on rated load(JEDEC Method) on rated	IFSM	100.0	A
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, Tj=25℃		200.0	A
Current squared time @1ms≤t8.3≤ms Tj=25℃， Rating of per diode	I^2t	41.5	A^2S
Maximum Forward Voltage at 10.0A DC	V_{FM}	0.9	V
Maximum Reverse Current TA = 25℃	IR	0.1	mA
at Rated DC Blocking Voltage TA = 100℃		20	mA
Typical Thermal Resistance Between junction and ambien	R_{QJa}	75.0	℃/W
Between Junction and Case	R_{QJC}	4.0	
Operating Junction Temperature Range	T_J	—55to+150	℃
Storage Temperature Range	T_{STG}	—55to+150	℃

FIG.1MAXIMUM AVERAGE FORWARD CURRENT DERATING

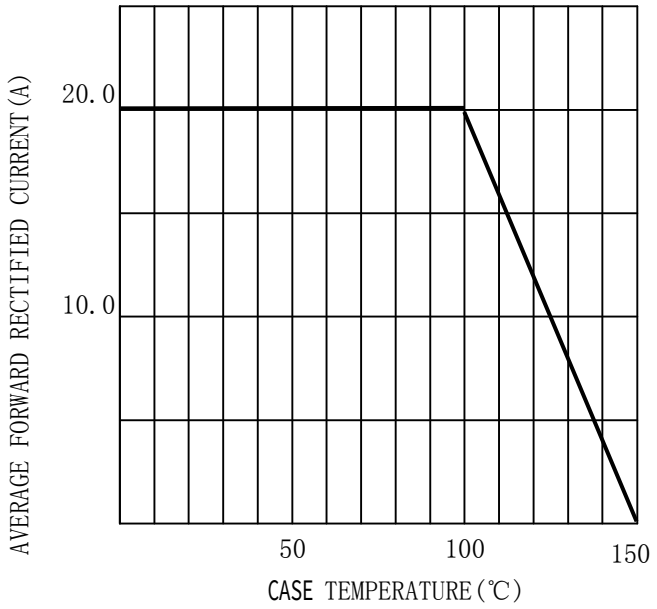


FIG.2TYPICAL FORWARD CHARACTERISTICS

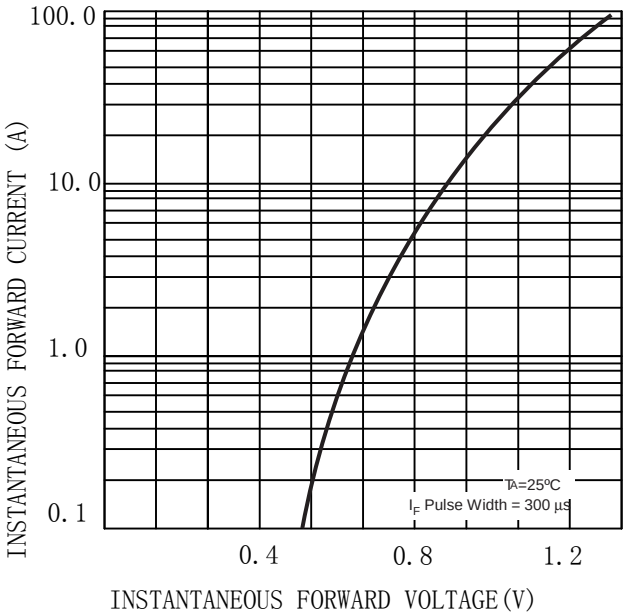


FIG.3MAXIMUM NON-REPEITIVE SURGE CURRENT

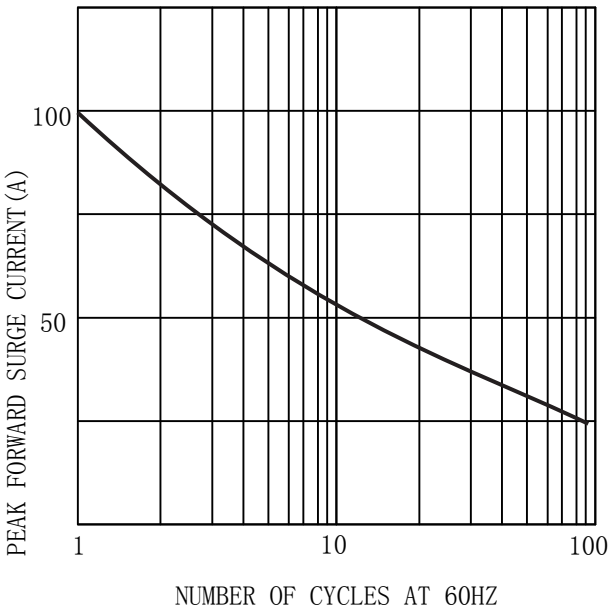
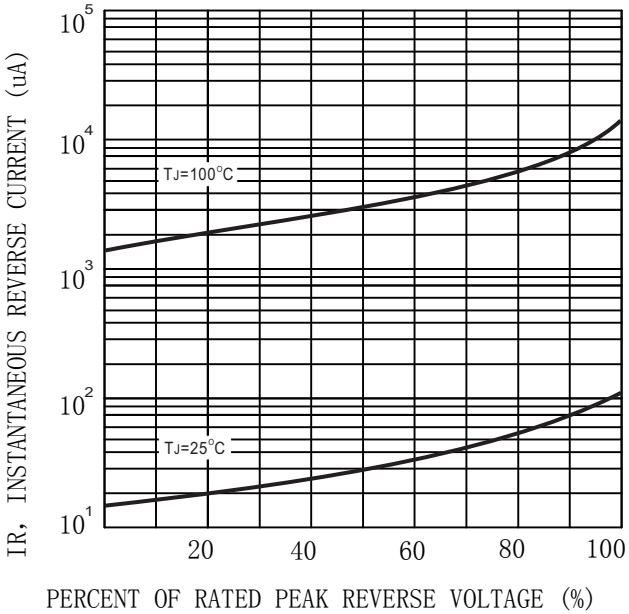
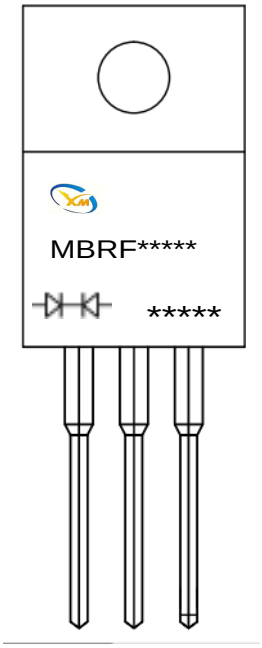


FIG. 4 TYPICAL REVERSE CHARACTERISTICS(per element)



MARKING INFORMATION

TO-220F/FCT



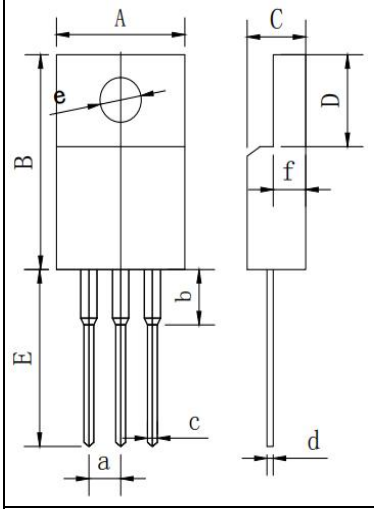
= Polar line

= Logo

***** = Date Code Marking

MBRF****** = Marking Code

Package Outline Dimensions millimeters

TO-220F/FCT					
	DIM	INCHES		MM		NOTE
		min	max	min	max	
	A	—	0.41	—	10.30	
	B	0.61	0.64	15.60	16.20	
	C	0.18	0.19	4.50	4.90	
	D	0.26	0.28	6.60	7.00	
	E	0.50	0.53	12.80	13.40	
	a	0.10	0.10	2.45	2.65	
	b	—	0.16	—	4.10	
	c	0.03	0.04	0.72	0.92	
	d	0.02	0.02	0.40	0.60	
	e	—	0.15	—	3.80	Ø
	f	0.09	0.11	2.40	2.80	

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