

DESCRIPTION

The SF2004 meet the ROHS and Green Product requirement with full function reliability approved.

FEATURE

- *Ultrafast Recovery Times and Low Recovery Loss
- *Low Forward Voltage
- *Low Reverse Leakage Current

MARKING

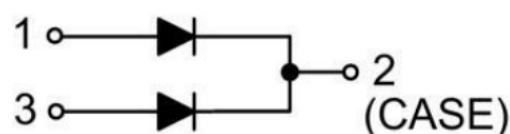
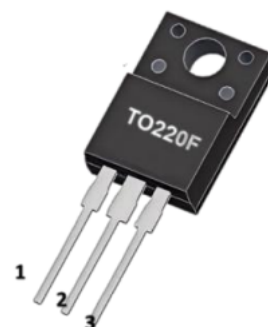


 : HY LOGO

SF2004=Device Code

XXX=Date Code

Solid Dot=Green molding compound



ABSOLUTE MAXIMUM RATINGS(TA=25°C, unless otherwise specified.)

SYMBOL	PARAMETER	MUR1060CT	UNIT
VRRM	Peak Repetitive Reverse Voltage	400	V
VR	DC Blocking Voltage		
IF(AV)	Average rectified output current@ Per leg(TC=138°C)	10	A
	Average rectified output current@ Total device(TC=138°C)	20	
IFSM	Non-Repetitive Surge Forward Current (8.3ms)	200	A
PD	Power dissipation	63	W
RθJC	Thermal Resistance From Junction to Case	3.0	°C/W
Tj	Operating Junction Temperature Range	-55 ~ +150	°C
Tstg	Storage Temperature Range	-55 ~ +150	°C

ELECTRICAL CHARACTERISTICS (TA=25°C, unless otherwise specified)

SYMBOL	PARAMETER	TEST CONDITIONS		MIN.	TYP.	MAX.	UNIT
V(BR)	Reverse Voltage	IR=100μA		400			V
IR	Reverse Current	VR=400V	Tj=25°C			3	μA
			Tj= 125°C			65	μA
VF	Forward Voltage	IF=10A	Tj=25°C		1.0	1.35	V
			Tj= 125°C		0.95		V
trr	Reverse Recovery time	IF=0.5A, IR=1A,Irr=0.25A			35		ns



SF2004

HYPERFAST RECTIFIER, FRED

■ TYPICAL CHARACTERISTICS

FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

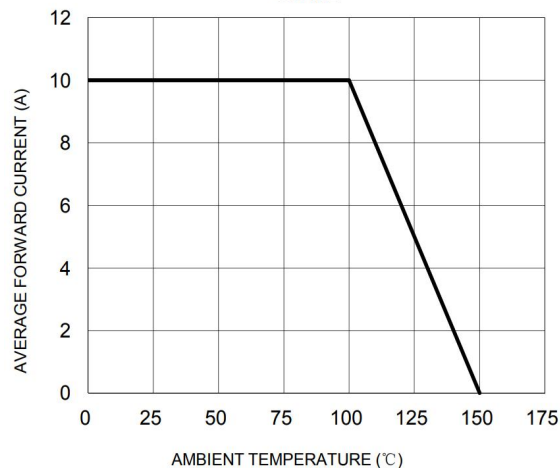


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

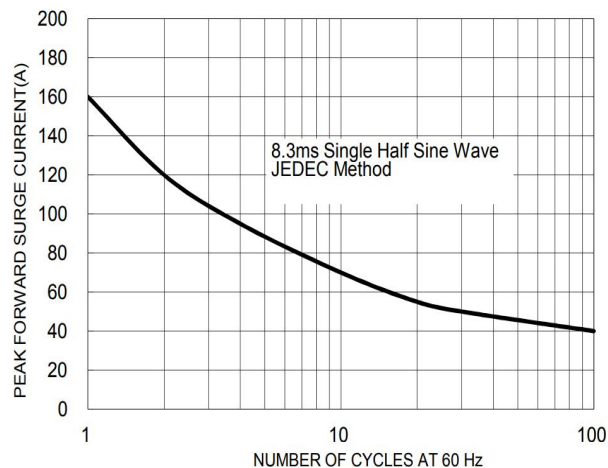


FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

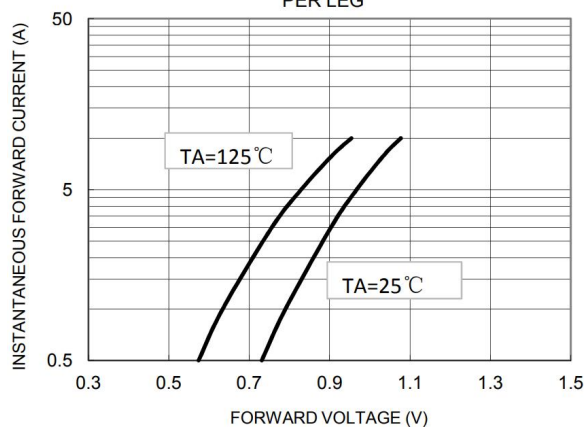
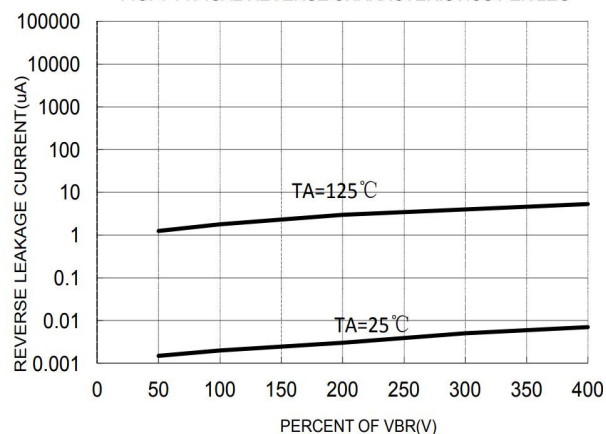


FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG

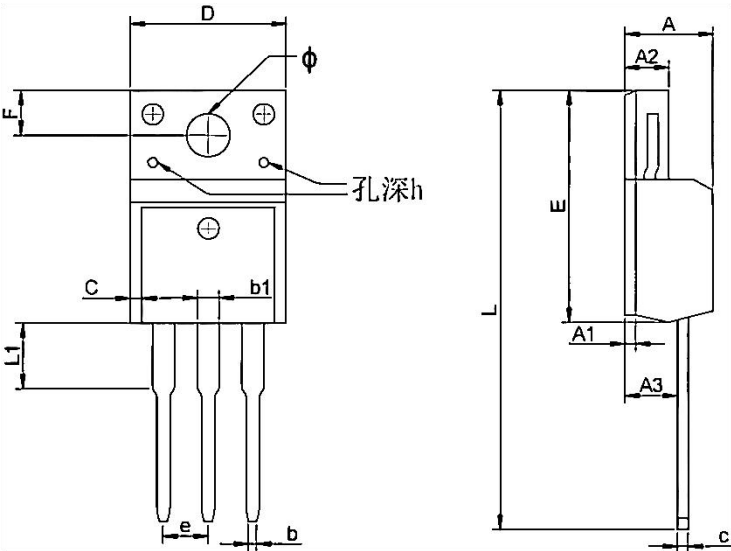




SF2004

HYPERFAST RECTIFIER,FRED

TO- 220F PACKAGE OUTLINE DIMENSIONS



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max	Min	Max
A	4.300	4.750	0.169	0.185
A1	1.830 REF		0.072 REF	
A2	2.300	2.850	0.090	0.112
A3	2.500	2.900	0.098	0.114
b	0.400	0.420	0.016	0.016
b1	1.220	1.280	0.048	0.050
C	0.690	0.720	0.027	0.028
c	0.490	0.510	0.019	0.020
D	9.960	10.200	0.392	0.400
E	15.000	15.950	0.588	0.625
e	2.574 TYP		0.101TYP	
F	3.470 REF		0.136 REF	
y	3.200 REF		0.125 REF	
h	0.000	0.300	0.000	0.012
L	28.780	28.900	1.128	1.133
L1	2.990	3.100	0.117	0.122

TO - 220F PACKING INFORMATION

Package version	Tube dimensions LxWxH (mm)	Per Tube (pcs)	Tube per box	Inner box dimensions LxWxH (mm)	PCS/ Inner box	Outer box dimensions LxWxH(mm)	PCS/ Outer box
TO-220F	530*32*7	50	20	580*155*50	1000	602*277*188	5000