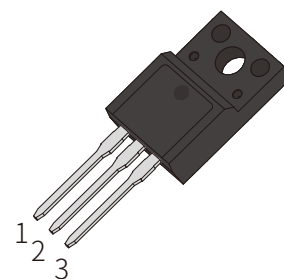


FEATURES

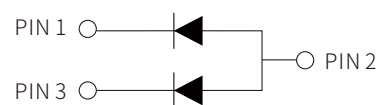
- Construction Utilizes Void-free Molded Plastic Technique
- Low Reverse Leakage
- High Forward Surge Current Capability



TO-220F

MECHANICAL DATA

- Case : Molded Plastic Body
- Polarity : Polarity Symbol Marking on Body
- Mounting Position : Any



Schematic Symbol

APPROVALS

RoHS	Compliance with 2011/65/EU
HF	Compliance with IEC61249-2-21:2003

MAXIMUM RATINGS ($T_A=25^{\circ}\text{C}$)

Parameter		Symbol	ER1005 FCTR	ER1010 FCTR	ER1020 FCTR	ER1040 FCTR	ER1050 FCTR	ER1060 FCTR	Unit
Marking			ER1005 FCTR	ER1010 FCTR	ER1020 CTR	ER1040 FCTR	ER1050 FCTR	ER1060 FCTR	
Maximum Repetitive Peak Reverse Voltage		V _{RRM}	50	100	200	400	500	600	V
Maximum RMS Voltage		V _{RMS}	35	70	140	280	350	420	V
Maximum DC Blocking Voltage		V _{DC}	50	100	200	400	500	600	V
Maximum Average Forward Rectified Current At T _c =110°C	per device	I _(AV)	10.0						A
	per diode		5.0						
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed On Rated Load		I _{FSM}	60.0						A
Maximum Instantaneous Forward Voltage at 5.0A		V _F	1.0			1.3	1.7		V
Maximum DC Reverse Current at Rated DC Blocking Voltage	T _A =25°C	I _R	10						mA
	T _A =125°C		500						mA
Typical Thermal Resistance		R _{θJC}	3.5						°C/W
Maximum reverse recovery time		T _{rr}	35						ns
Operating Junction And Storage Temperature Range		T _J ,T _{STG}	-55 ~ +150						°C

Note:1.Reverse recovery time test condition: $I_F=0.5\text{A}$ $I_R=1.0\text{A}$ $I_{rr}=0.25\text{A}$

CHARACTERISTIC CURVES

Fig.1 -Derating Curve Output Rectified Current

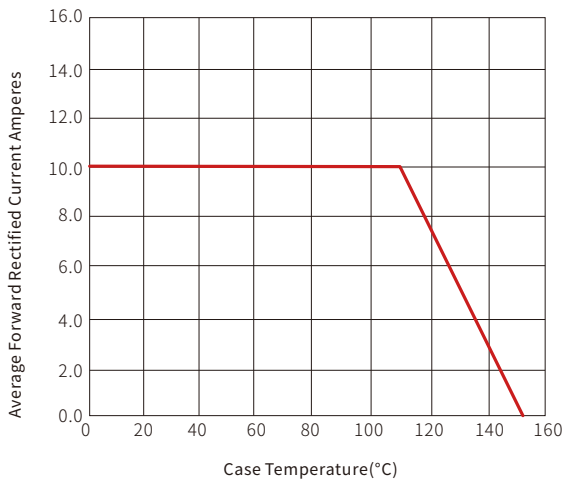


Fig.2 -Maximum Non-Repetitive Peak Forward Surge Current Perleg

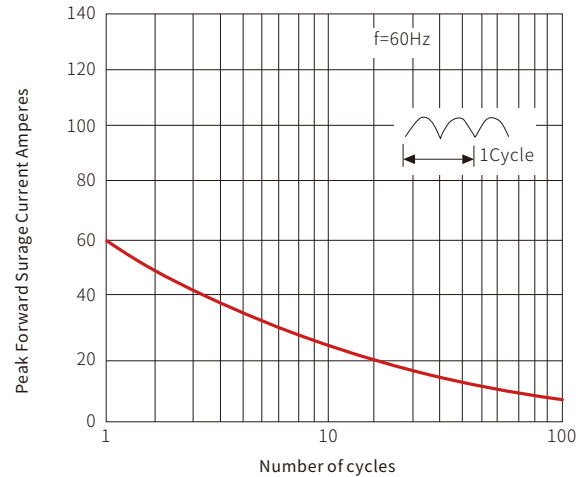


Fig.3 -Typical Forward Voltage Characteristics

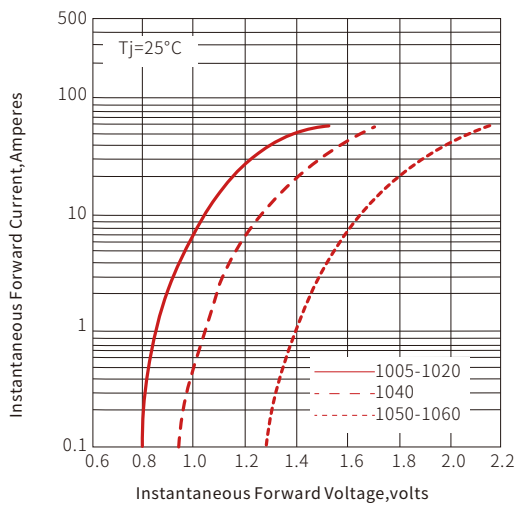
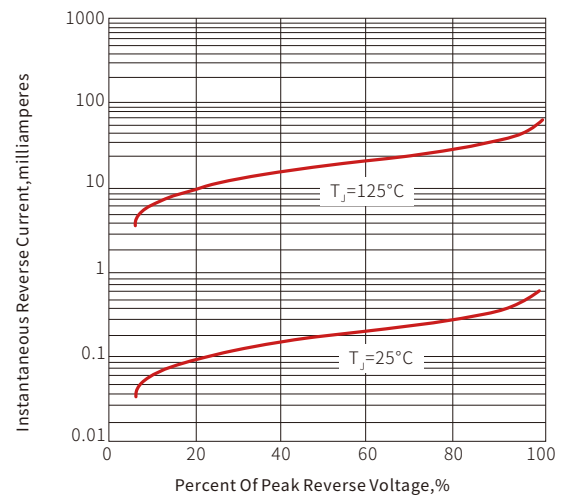
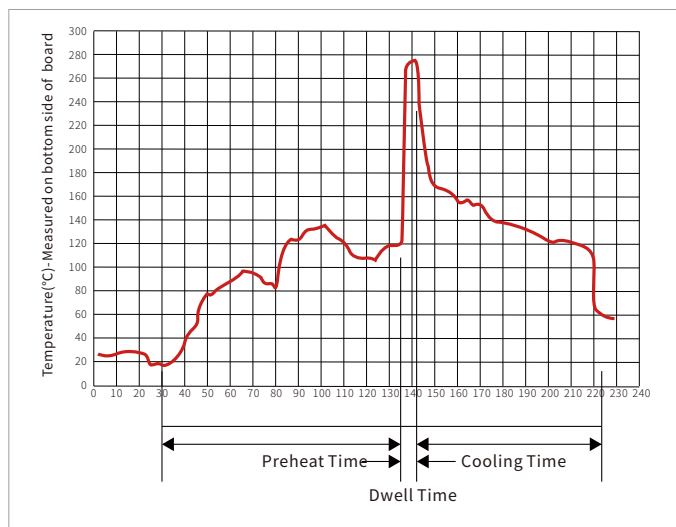


Fig.4 -Typical Reverse Leakage Characteristics

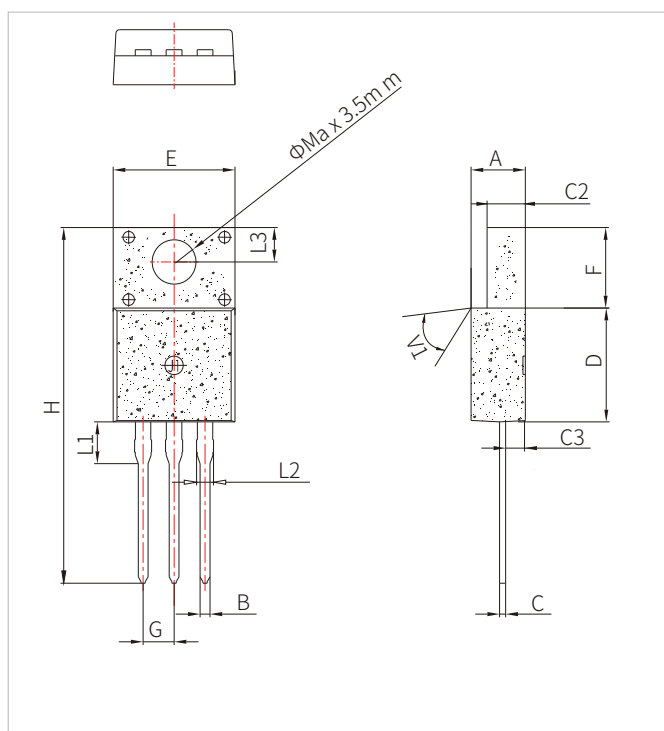


WAVE SOLDERING



Wave Parameter		Lead-free assembly
Pre Heat	Temperature Min	100°C
	Temperature Max	150°C
	Time(min to max)	60 – 180 secs
Solder pot Temperature		280°C Max
Solder Dwell Time		2-5 seconds

TO-220F PACKAGE MECHANICAL DATA



Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	4.40		4.90	0.173		0.193
B	0.74	0.80	0.83	0.029		0.033
C	0.45		0.75	0.018		0.030
C2	2.40		2.70	0.094		0.106
C3	2.60		3.00	0.102		0.118
D	8.80		9.30	0.346		0.366
E	9.70		10.4	0.382		0.409
F	6.40		7.00	0.252		0.276
G		2.54			0.1	
H	28.0		30.0	1.102		1.181
L1		3.55			0.140	
L2	1.14		1.70	0.045		0.067
L3		3.30			0.130	
V1		45°			45°	

ORDERING INFORMATION

Part Number	Component Package	QTY/Tube	QTY/Box	QTY/Carton
ER1005FCTR-ER1060FCTR	TO-220F	50PCS	1000PCS	5000PCS

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