



## UF800~UF810 ULTRA FAST RECOVERY RECTIFIER

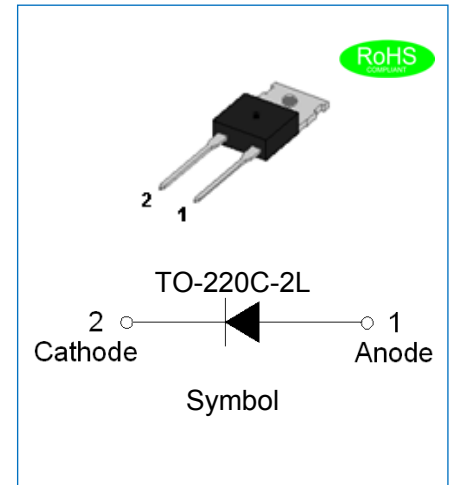
Rev.2.4

### DESCRIPTION

- ◇ Plastic package has underwriters laboratory flammability classification 94V-0
- ◇ Glass passivated chip junction
- ◇ Lead free in comply with EU RoHS 2011/65/EU directives
- ◇ Ultrafast recovery time for high efficiency

### MECHANICAL DATA

- ◇ Case: TO-220C-2L, molded plastic over passivated junction
- ◇ Terminals: Solder plated, solderable per J-STD-002
- ◇ Weight: 2.04gram



### ABSOLUTE MAXIMUM RATING AND ELECTRICAL CHARACTERISTICS

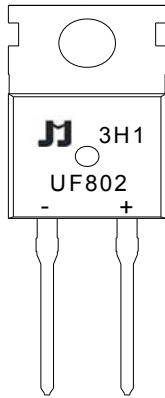
(Rating at 25°C ambient temperature unless otherwise specified.)

Parameter	Symbol	UF800	UF801	UF802	UF804	UF806	UF808	UF810	Unit
Maximum repetitive peak reverse voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum average forward current at $T_L=100^\circ\text{C}$	$I_{F(AV)}$	8							A
Peak forward surge current: 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	150							A
Maximum forward voltage @ $I_F=8\text{A}$	$V_F$	1.0		1.3		1.7			V
Maximum DC reverse current at rated DC blocking voltage	$T_j=25^\circ\text{C}$	5.0							$\mu\text{A}$
	$T_j=150^\circ\text{C}$	500							$\mu\text{A}$
Typical junction capacitance $V_R=4.0\text{V}$ , $f=1\text{MHz}$	$C_J$	200				85			pF
Operating junction and storage temperature range	$T_j, T_{stg}$	-55 to +150							$^\circ\text{C}$
Maximum reverse recovery time $I_F=0.5\text{A}$ , $I_R=1\text{A}$ , $I_{rr}=0.25\text{A}$	$t_{rr}$	50				75			ns

**THERMAL RESISTANCES**

Symbol	Parameter	UF800	UF801	UF802	UF804	UF806	UF808	UF810	Unit
$R_{th(j-c)}$	Junction to case	4							$^{\circ}C/W$

**MARKING**



UF	Ultra Fast Recovery Rectifier
8	$I_{F(AV)}=8A$
02	$V_{RRM}:200V$

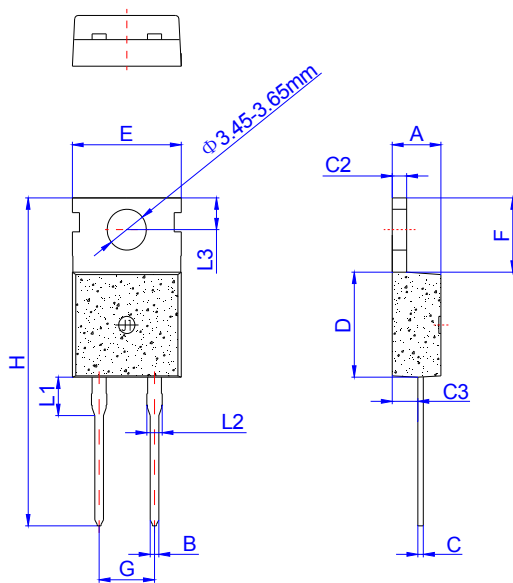
$\underline{x}H1$ : Month, 1、2、3 ~ 9、A、B、C

$3\underline{x}1$ :

2018	2019	2020	2021	2022	2023	2024
H	I	J	K	L	M	N
2025	2026	2027	2028	2029	2030	...
O	P	Q	R	S	T	...

$3H\underline{x}$ : Batch number

**PACKAGE MECHANICAL DATA**

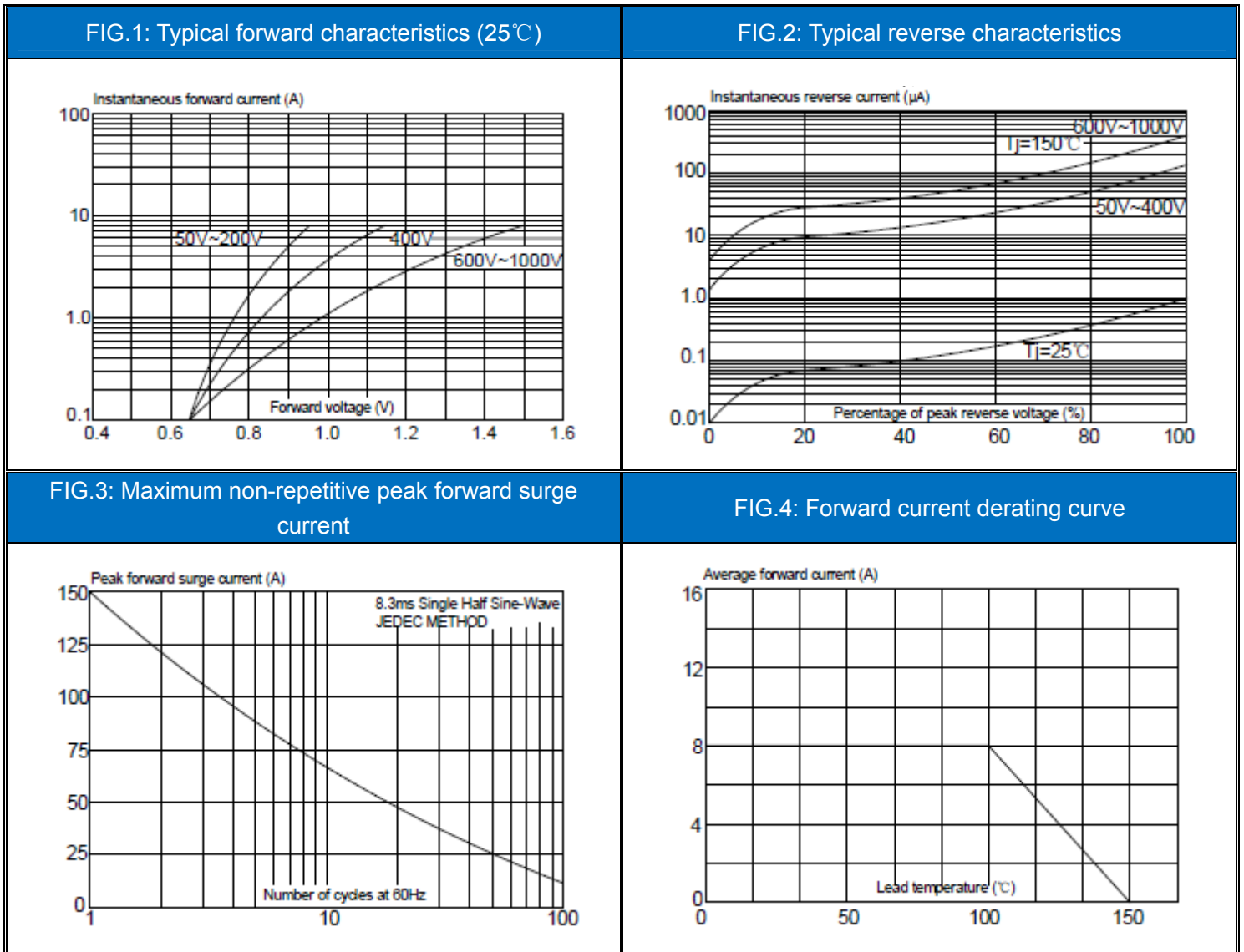


Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	4.40		4.60	0.173		0.181
B	0.70		0.90	0.028		0.035
C	0.45		0.60	0.018		0.024
C2	1.23		1.32	0.048		0.052
C3	2.20		2.60	0.087		0.102
D	8.90		9.90	0.350		0.390
E	9.90		10.3	0.390		0.406
F	6.30		6.90	0.248		0.272
G		5.08			0.200	
H	28.0		29.8	1.102		1.173
L1		3.39			0.133	
L2	1.14		1.70	0.045		0.067
L3	2.65		2.95	0.104		0.116
$\Phi$		3.6			0.142	

**PACKAGE INFORMATION-TO-220C-2L**

OUTLINE	UNIT WEIGHT (g/PCS) typ.	TUBE (PCS)	PER CARTON (PCS)
TUBE	2.04	50	8,000

CHARACTERISTICS CURVE



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