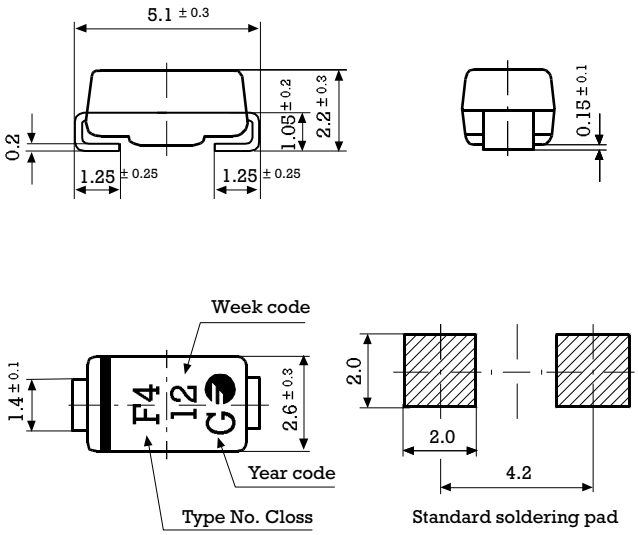
1 Amp. Surface Mounted Glass Passivated Ultrafast Efficient Rectifier

Dimensions in mm.

CASE:
SMA/DO-214AC



Voltage
50 to 200 V

Current
1.0 A

HYPERECTIFIER®

- **Glass passivated junction**
- High current capability
- The plastic material carries U/L 94 V-0
- Low profile package
- Easy pick and place
- High temperature soldering 260 °C 10 sec

MECHANICAL DATA

Terminals: Solder plated, solderable per IEC 68-2-20.
Standard Packaging: 4 mm. tape (EIA-RS-481).
Weight: 0.064 g.

Datasheet Directory

Maximum Ratings and Electrical Characteristics at 25 °C

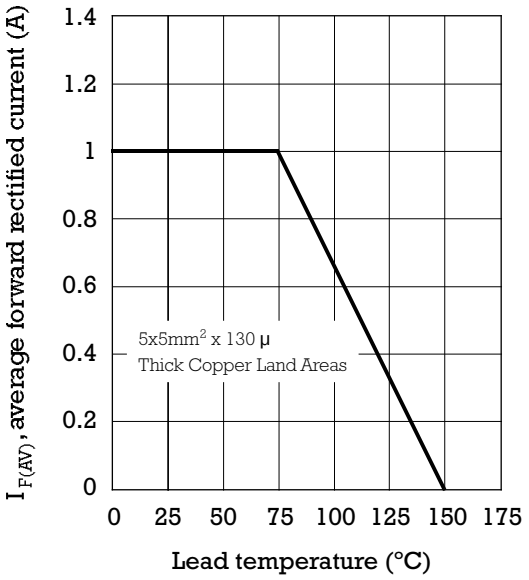
		FUES1A	FUES1B	FUES1D
Marking Code		UA	UB	UD
V_{RRM}	Maximum Recurrent Peak Reverse Voltage (V)	50	100	200
V_{RMS}	Maximum RMS Voltage (V)	35	70	140
V_{DC}	Maximum DC Blocking Voltage (V)	50	100	200
$I_{F(AV)}$	Forward current at T_L = 75 °C	1.0 A		
I_{FSM}	8.3 ms. peak forward surge current (Jedec Method)	30 A		
V_F	Max. Instantaneous Forward Voltage Drop at 1.0A at 0.6A	0.920 V 0.865 V		
I_R	Maximum DC Reverse Current Ta = 25 °C at Rated DC Blocking Voltage Ta = 100 °C	2 µA 100 µA		
T_{rr}	Maximum Reverse Recovery Time (0.5/1/0.25A)	25 ns		
C_j	Typical Junction Capacitance (1MHz; -4V)	8 pF		
$R_{th\ (j-l)}$ $R_{th\ (j-a)}$	Typical Thermal Resistance (5x5 mm² x 130 µ Copper Area)	27 °C/W 75 °C/W		
T_j - T_{stg}	Operating Junction and Storage Temperature Range	-55 to + 150 °C		

Electrical Characteristics at Tj = -40 °C to +150°C

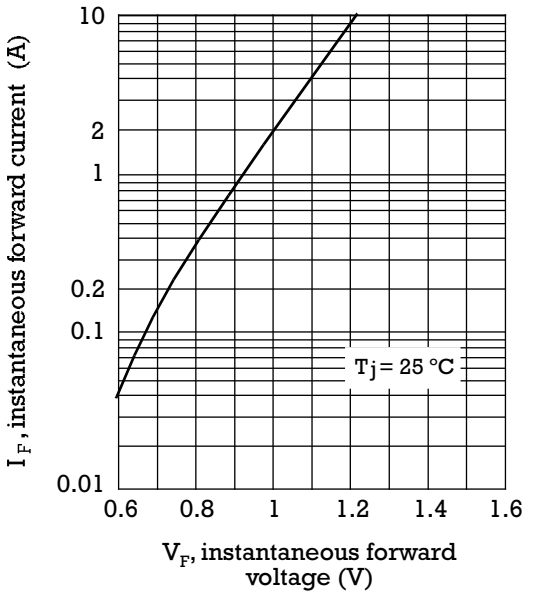
V_F	Max. forward voltage drop at I_F = 1 A	1.05 V
I_R	Maximum DC Reverse Current at rated DC Blocking Voltage	1500 µA

Rating And Characteristic Curves

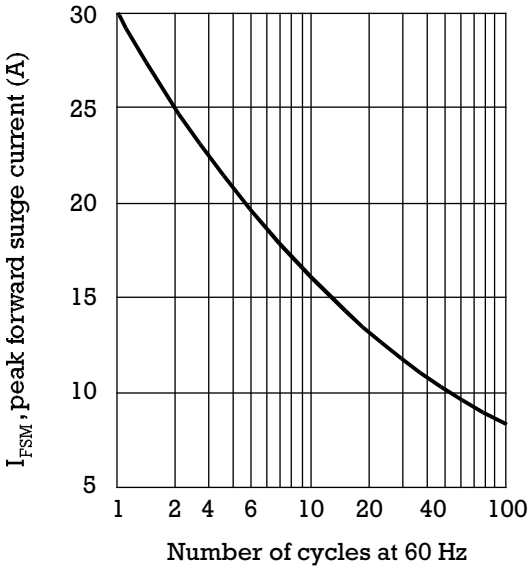
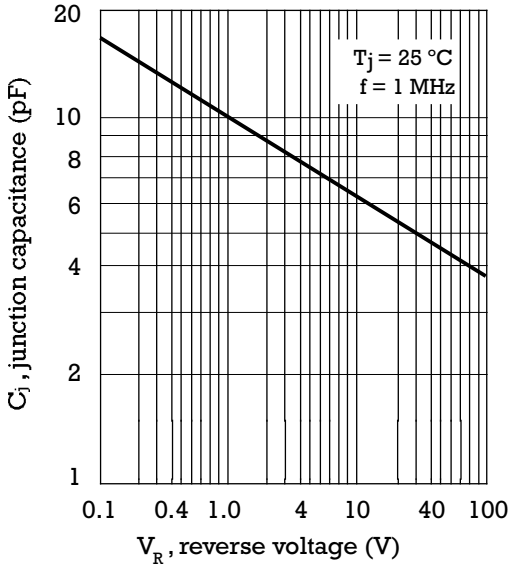
FORWARD CURRENT DERATING CURVE



TYPICAL FORWARD CHARACTERISTIC



MAXIMUM NON REPETITIVE PEAK FORWARD SURGE CURRENT



TYPICAL JUNCTION CAPACITANCE