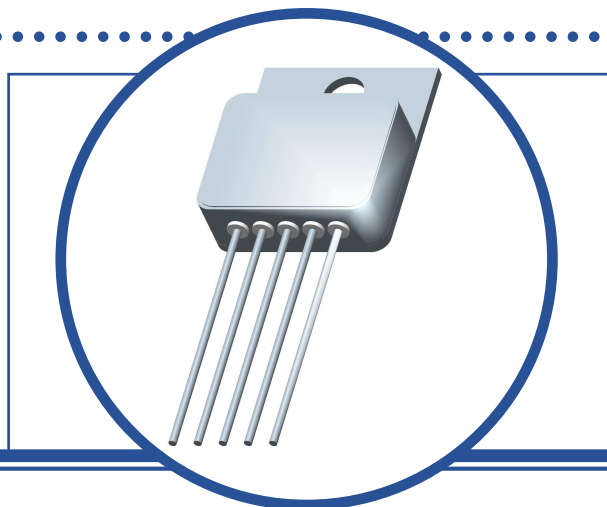


ULTRAFAST RECOVERY POWER RECTIFIER DIODE

SML1200HIC-FB

- 1200V, 8A Full Bridge Rectifier Configuration
- Fast Reverse Recovery ($t_{rr} = 40\text{ns}$)
- High Speed Low Loss Switching
- Hermetic TO258D Isolated Package with Ceramic Seals
- Switch Mode Power Supply applications
- High-Reliability Screening Options Available



ABSOLUTE MAXIMUM RATINGS (Per Die, $T_A = 25^\circ\text{C}$ unless otherwise stated)

V_{RRM}	Repetitive Peak Reverse Breakdown Voltage	1200V
V_{RSM}	Surge Peak Reverse Voltage	1200V
V_{DC}	DC Blocking Voltage	1200V
$I_F(\text{AVG})$	Average Forward Current	8A
I_{FSM}	Surge Current, $t_p = 8.3\text{ms}$	56A
T_J	Junction Temperature Range	-65 to +175°C
T_{stg}	Storage Temperature Range	-65 to +175°C

THERMAL PROPERTIES (Per Die)

Symbols	Parameters	Max.	Units
$R_{\theta JC}$	Thermal Resistance, Junction To Case	2.4	°C/W

ELECTRICAL CHARACTERISTICS (Per Die, $T_A = 25^\circ\text{C}$ unless otherwise stated)

Symbols	Parameters	Test Conditions	Min.	Typ.	Max.	Units
$V_F^{(1)}$	Forward Voltage	$I_F = 8.0\text{A}$ $T_A = 150^\circ\text{C}$			2.75	V
					1.79	
I_R	Reverse Current	$V_R = V_{RRM}$ $T_A = 150^\circ\text{C}$			100	μA
					500	

DYNAMIC CHARACTERISTICS

t_{rr}	Reverse Recovery Time	$I_F = 1.0\text{A}$ $V_R = 30\text{V}$ $di/dt = 100\text{A}/\mu\text{s}$ (min)		40		ns

Notes

(1) Pulse Width $\leq 300\mu\text{s}$, $\delta \leq 2\%$

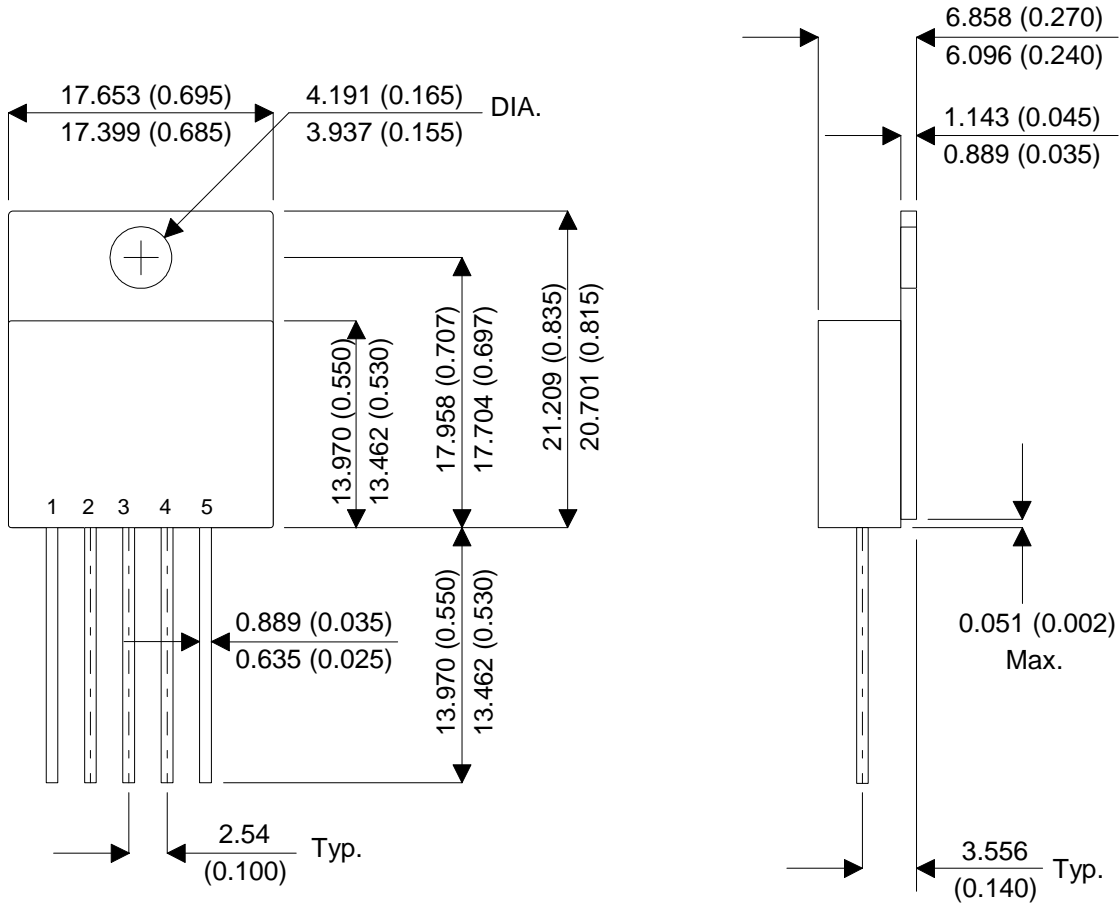
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ULTRAFAST RECOVERY POWER RECTIFIER DIODE SML1200HIC-FB

MECHANICAL DATA

Dimensions in mm (Inches)



TO258D (MO-078AA)

PIN 1	+ Rectified DC
PIN 2	+ AC
PIN 3	N/C
PIN 4	- AC
PIN 5	- Rectified DC

