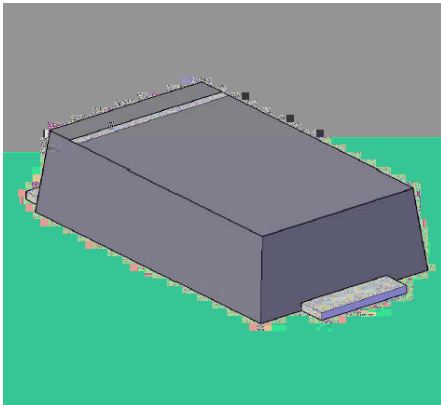


Surface Mount Fast Recovery Rectifier



r fast recovery
 High forward surge capability
 Meets MSL level 1 per J-STD-020 LF maximum peak
 of 2 * 10⁶ C

Typical Applications

For use in fast switching rectification of power supply, inverters, converters, and freewheeling diodes for consumer and telecommunication.

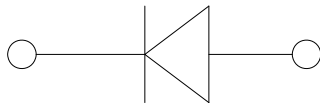
Mechanical Data

Package: SOD-123HE

Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant, halogen-free

Terminals: Tin plated leads, solderable per J-STD-002 and JESD22-B102

Polarity: Cathode line denotes the cathode end



Maximum Ratings (T_a=25 °C Unless otherwise specified)

PARAMETER

average rectified output current 4 * 10 ⁴ Hz sine wave, Resistance load, T _a = 25 °C	I _O	A	2.0
Forward Surge Current (Non-repetitive) 4 * 10 ⁴ Hz Half-sine wave, 1 cycle, T _a = 25 °C	I _{FSM}	A	50
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, T _j =25 °C			100
Current squared time @1ms t ₈₁	T _{stg}		-55 ~ +150
Junction temperature	T _j		-55 ~ +150



F2AE THRU F2ME

Electrical Characteristics $T_a=25$ Unless otherwise specified

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	F2AE	F2BE	F2DE	F2GE	F2JE	F2KE	F2ME
Maximum instantaneous forward voltage drop per diode	V _F	V	I _{FM} =2.0A	1.3						
Maximum reverse recovery time	t _r	ns	I _F =0.5A, I _R =1.0A, I _r =0.25A	150				250	500	
Maximum DC reverse current at rated DC blocking voltage per diode	I _R	μA	T _j =25	5						
			T _j =125	100						

Thermal Characteristics $T_a=25$ Unless otherwise specified

PARAMETER	SYMBOL	UNIT	F2AE	F2BE	F2DE	F2GE	F2JE	F2KE	F2ME	
Typical Thermal resistance	R _{J-A} ⁽¹⁾	/W					90			

F2AE THRU F2ME

F2AE THRU F2ME

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