

FS4

SURFACE MOUNT ULTRAFAST RECTIFIER

VOLTAGE: 400 V

CURRENT: 1.0A



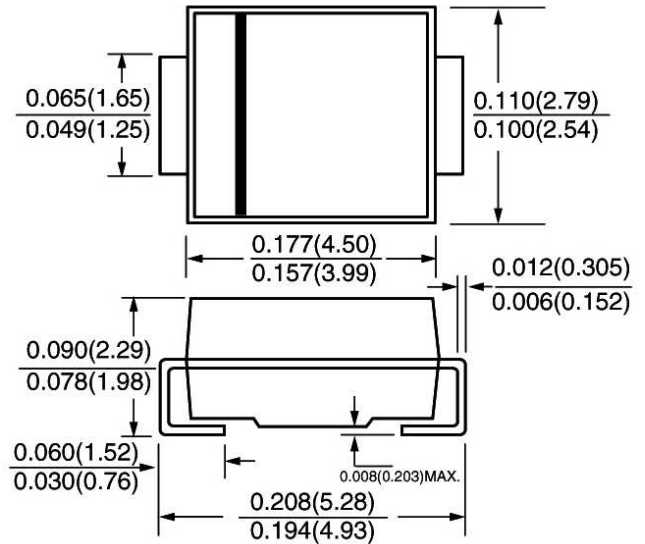
FEATURE

Ideal for surface mount pick and place application
Low profile package
Built-in strain relief
High surge capability
High temperature soldering guaranteed
260°C/10sec/at terminals
Glass passivated chip
Ultrafast recovery time for high efficiency

MECHANICAL DATA

Terminal: Solder plated, solderable per MIL-STD-750, Method 2026
Case: JEDEC DO-214AC molded plastic over glass passivated chip
Polarity: Color band denotes cathode

SMA / DO-214AC



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half-wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated, for capacitive load, derate current by 20%)

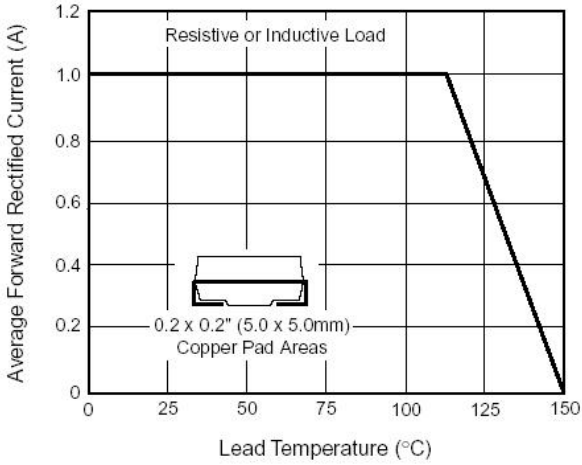
	SYMBOL	FS4	units
Maximum Recurrent Peak Reverse Voltage	V _{rrm}	400	V
Maximum RMS Voltage	V _{rms}	280	V
Maximum DC blocking Voltage	V _{dc}	400	V
Maximum Average Forward Rectified Current 3/8" lead length at T _L = 110°C	I _{f(av)}	1.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I _{fsm}	30.0	A
Maximum Forward Voltage at rated forward current	V _f	1.25	V
Maximum DC Reverse Current Ta = 25°C at rated DC blocking voltage Ta = 100°C	I _r	10.0 100.0	μ A μ A
Maximum Reverse Recovery Time (Note 1)	T _{rr}	25	nS
Typical Junction Capacitance (Note 2)	C _j	18.0	pF
Typical Thermal Resistance (Note 3)	R(jl)	30.0	°C/W
Storage and Operating Junction Temperature	T _{stg} , T _j	-50 to +150	°C

Note:

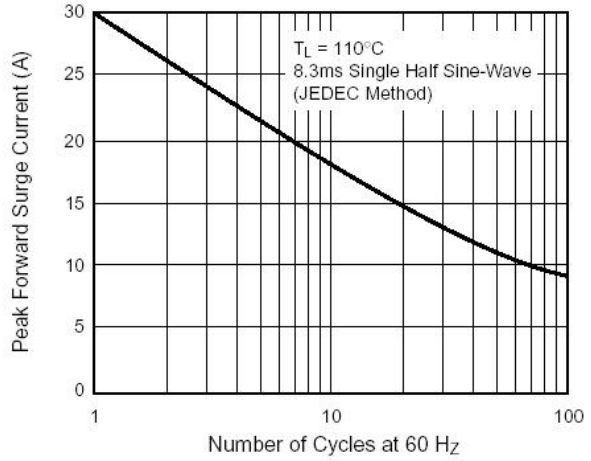
1. Reverse Recovery Condition I_f = 0.5A, I_r = 1.0A, I_{rr} = 0.25A
2. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
3. Thermal Resistance from Junction to terminal mounted on 5×5mm copper pad area¹

RATINGS AND CHARACTERISTIC CURVES FS4

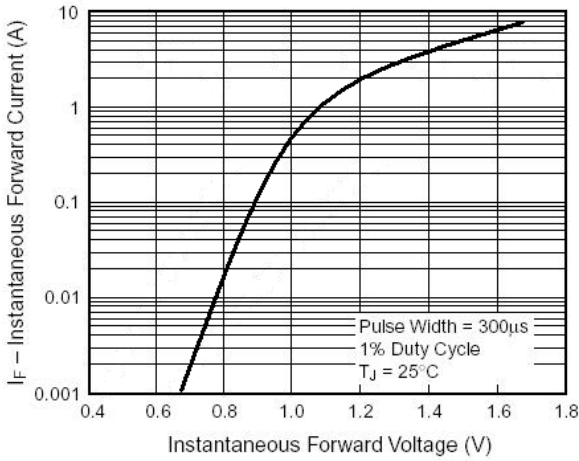
Forward Current Derating Curve



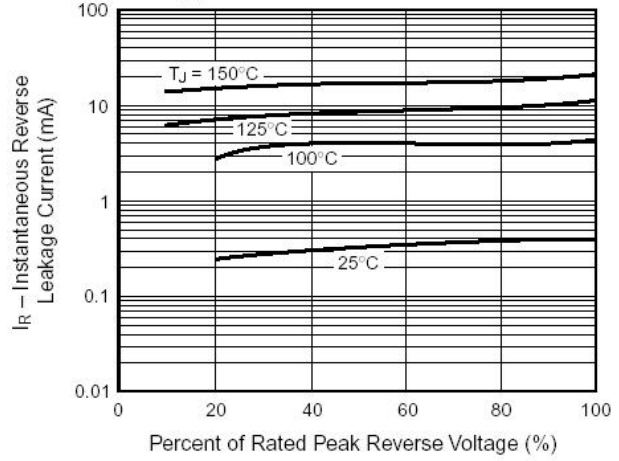
Maximum Non-Repetitive Peak Forward Surge Current



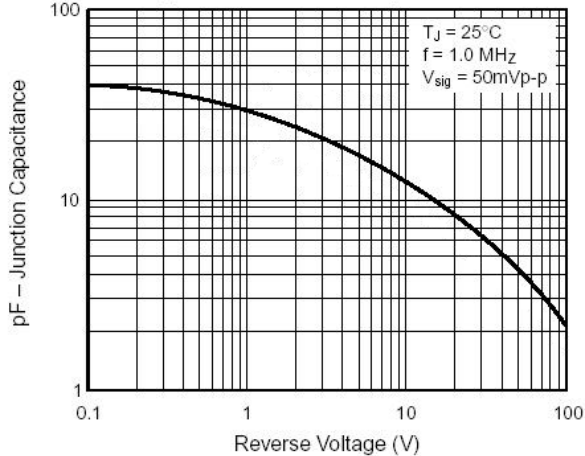
Typical Instantaneous Forward Characteristics



Typical Reverse Characteristics



Typical Junction Capacitance



Typical Transient Thermal Impedance

