

Voltage Range 50 to 1000 V
Current 1.0 Ampere

Features

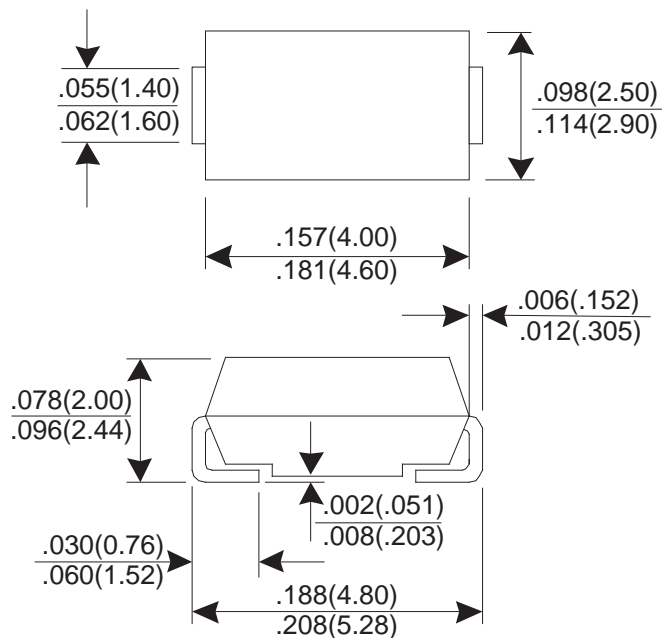
- Fast switching for high efficiency
- Low forward voltage drop
- High current capability
- Low reverse leakage current
- High surge current capability
- Glass passivated chip

Mechanical Data

- Case: Molded plastic SMA/DO-214AC
- Epoxy: UL 94V-0 rate flame retardant
- Terminals: Solderable per MIL-STD-750 method 2026
- Polarity: Color band denotes cathode
- Mounting position: Any
- Weight: 0.064 gram

Dimensions in inches and (millimeters)

SMA/DO-214AC



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.
 Single phase, half wave, 60Hz, resistive or inductive load.
 For capacitive load, derate current by 20%.

PARAMTER	SYMBOL	TUS1A	TUS1B	TUS1D	TUS1G	TUS1J	TUS1K	TUS1M	UNIT
Maximum Recurrent 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 Rectified Current T _A =90°C	I _{F(AV)}	1.0							A
Peak Forward Surge Current, 8.3ms single Half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	30							A
Maximum Instantaneous Forward Voltage @ 1.5 A	V _F	1.0		1.3		1.7		V	
Maximum DC Reverse Current @T _J =25°C At Rated DC Blocking Voltage @T _J =125°C	I _R	5.0			100				uA uA
Maximum Reverse Recovery Time (Note 1)	T _{rr}	50				75			nS
Typical junction Capacitance (Note 2)	C _J	15							pF
Maximum Thermal Resistance (Note 3)	R _{θJA}	75							°CW
Operating Junction and Storage Temperature Range	T _J , T _{STG}	-55 to +150							°C

NOTES : (1) Reverse recovery test conditions I_F = 0.5A, I_R = 1.0A, I_{rr} = 0.25A.
 (2) Thermal Resistance junction to ambient.
 (3) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts DC.

RATING AND CHARACTERISTIC CURVES

FIG.1 - FORWARD CURRENT DERATING CURVE

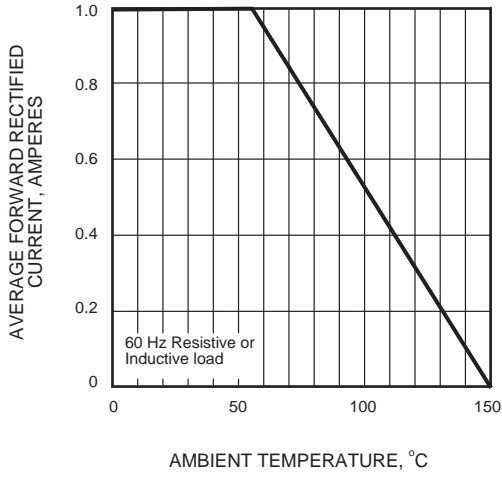


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

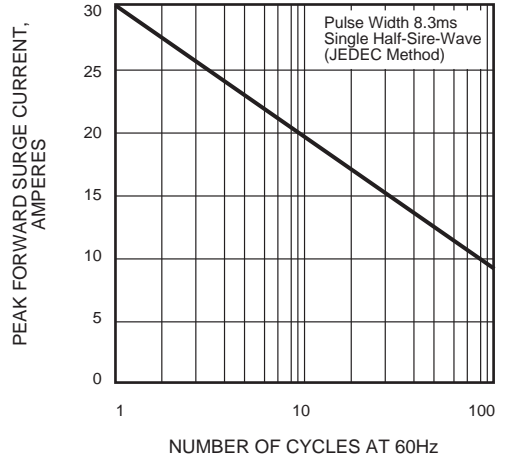


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

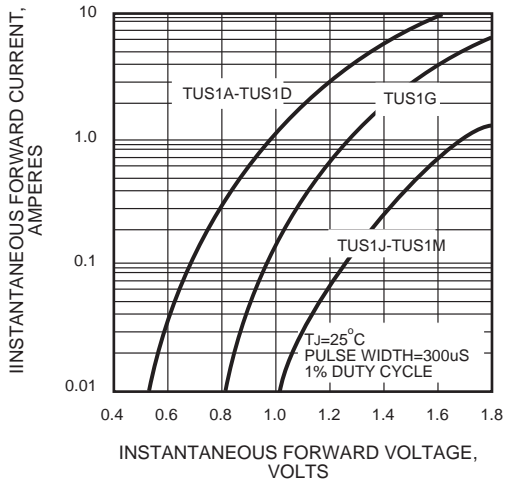


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

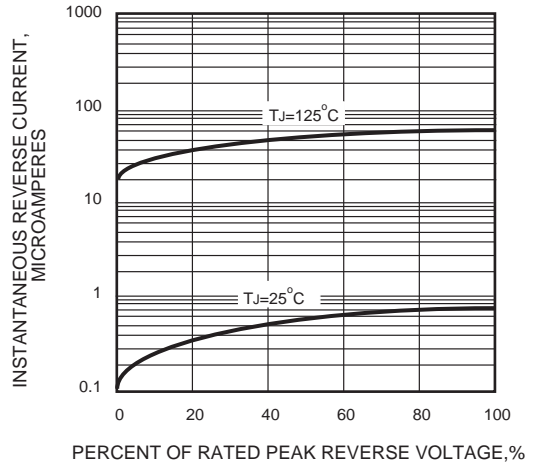


FIG.5 - TYPICAL JUNCTION CAPACITANCE

