DAYA SEMICONDUCTOR

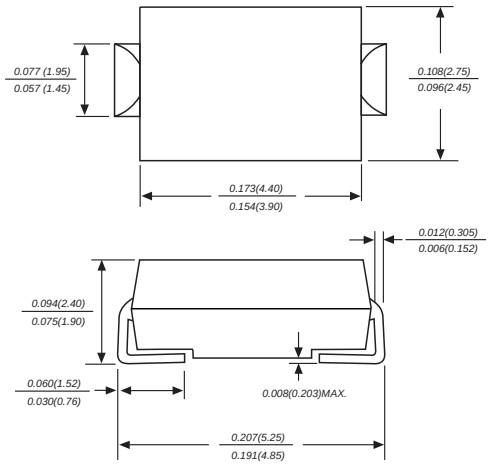
M8 THRU M9

SURFACE MOUNT GENERAL RECTIFIER

Reverse Voltage - 1300 to 1600 Volts Forward Current - 1.0 Ampere

SMA

DO-214AC



Dimensions in inches and (millimeters)

FEATURES

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- For surface mounted applications
- Low reverse leakage
- Built-in strain relief,ideal for automated placement
- High forward surge current capability
- High temperature soldering guaranteed: 250℃/10 seconds at terminals

MECHANICAL DATA

Case: JEDEC DO-214AC molded plastic body
Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode end
Mounting Position: Any
Weight:0.003 ounce, 0.093 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.
Single phase half-wave 60Hz,resistive or inductive load,for capacitive load current derate by 20%.

	SYMBOLS	M8	M9	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	1300	1600	VOLTS
Maximum RMS voltage	V_{RMS}	910	1120	VOLTS
Maximum DC blocking voltage	V_{DC}	1300	1600	VOLTS
Maximum average forward rectified current at T_L=110℃	$I_{(AV)}$	1.0		Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30.0		Amps
Maximum instantaneous forward voltage at 1.0A	V_F	1.0		Volts
Maximum DC reverse current T_A=25℃ at rated DC blocking voltage T_A=100℃	I_R	5.0 50.0		uA
Typical junction capacitance (NOTE 1)	C_J	15.0		pF
Typical thermal resistance (NOTE 2)	R_{qJA}	85.0		°C/W
Operating junction and storage temperature range	T_J,T_{STG}	-65 to +125		°C

Note:1.Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2.Thermal resistance junction to ambient,P.C.B. mounted with 0.2x0.2 ”(5.0x5.0mm) copper pad areas

RATINGS AND CHARACTERISTIC CURVES M8 THRU M9

FIG. 1- FORWARD CURRENT DERATING CURVE

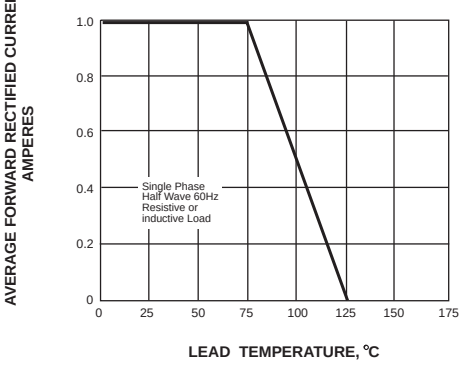


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

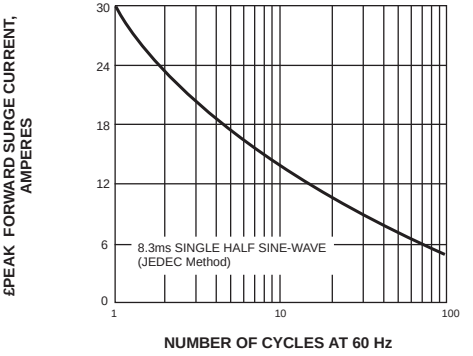


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

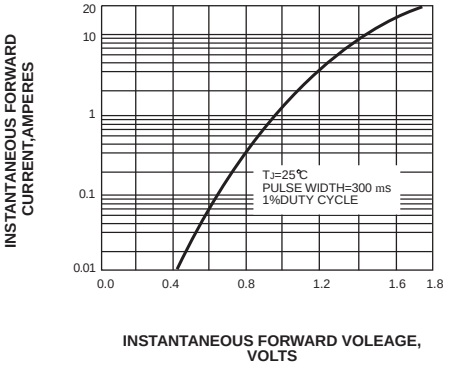


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

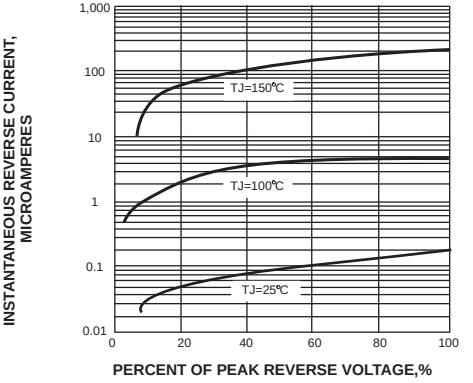


FIG. 5-TYPICAL JUNCTION CAPACITANCE

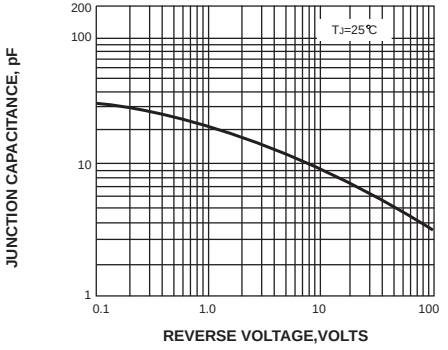


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE

