



FEATURES

- * Ideal for surface mount applications
- * Easy pick and place
- * Built-in strain relief
- * High surge current capability

MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Terminals: Solder plated, solderable per MIL-STD-202F, method 208 guaranteed
- * Polarity: Color band denotes cathode end
- * Mounting position: Any
- * Weight: 0.063 gram

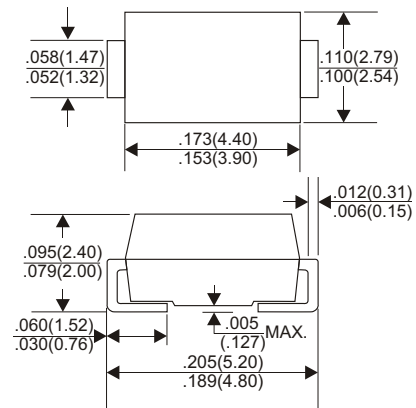
VOLTAGE RANGE

2000 Volts

CURRENT

2.0 Ampere

DO-214AC(SMA)



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

PARAMETER	SYMBOL	UNIT	EMA520
Device marking code			EMA520
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	V	2000
Maximum RMS Voltage	V _{RMS}	V	1400
Maximum DC blocking Voltage	V _{DC}	V	2000
Average rectified output current @60Hz sine wave, Resistance load, TL (FIG.1)	I _O	A	2.0
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave, 1 cycle, T _j =25°C	I _{FSM}	A	40
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, T _j =25°C			70
Current squared time @1ms≤t≤8.3ms T _j =25°C	I ² t	A ² s	3.735
Storage temperature	T _{stg}	°C	-55 ~ +150
Junction temperature	T _j	°C	-55 ~ +150

EMA520

■Electrical Characteristics (T_a=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	EMA520
Maximum instantaneous forward voltage	V _F	V	I _{FM} =2.0A	1.25
Maximum DC reverse current at rated DC blocking voltage	I _R	μA	T _j =25°C	5
			T _j =125°C	100
Typical junction capacitance	C _j	pF	Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	7

■Thermal Characteristics (T_a=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	EMA520
Typical Thermal Resistance	R _{θJ-A} ⁽¹⁾	°C/W	70
	R _{θJ-L} ⁽¹⁾		25
	R _{θJ-C} ⁽¹⁾		15

Note

- (1) Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.2" x 0.2" (5.0 mm x 5.0 mm) copper pad areas

RATING AND CHARACTERISTIC CURVES (EMA520)

Fig.1 Forward Current Derating Curve

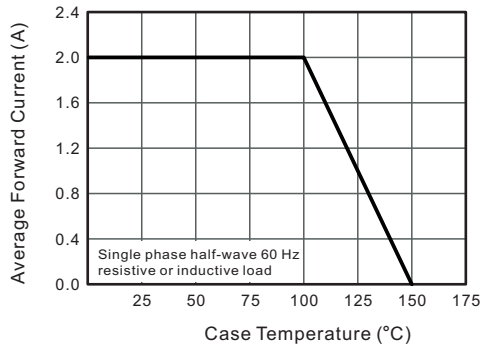


Fig.2 Typical Reverse Characteristics

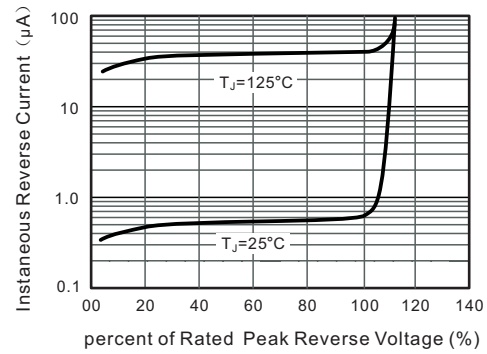


Fig.3 Typical Instantaneous Forward Characteristics

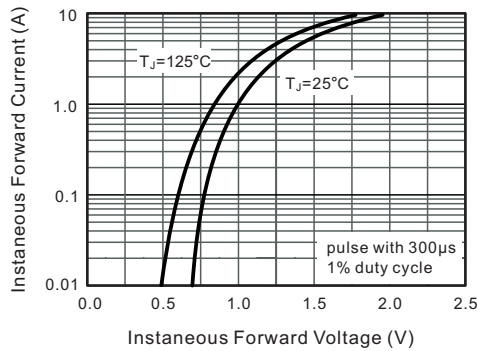


Fig.4 Typical Junction Capacitance

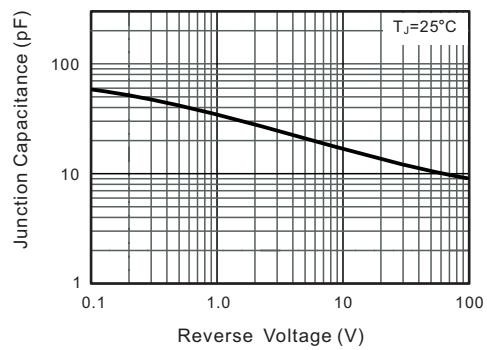


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

