

05N5817 THRU 05N5819

LOW Vf SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE 20 to 40 Volts CURRENT 0.5 Ampere

FEATURES

- * Low switching noise
- * Low forward voltage drop
- * High current capability
- * High switching capability
- * High surge capabitity
- * High reliability

MECHANICAL DATA

* Case: Molded plastic

* Epoxy: Device has UL flammability classification 94V-O

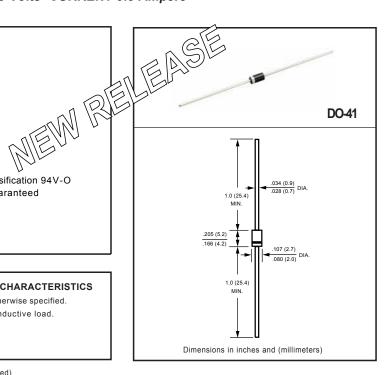
* Lead: MIL-STD-202E method 208C guaranteed

* Mounting position: Any

* Weight: 0.33 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 $^{\circ}$ C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.



MAXIMUM RATINGS (@ TA=25 °C unless otherwise noted)

RATINGS	SYMBOL	05N5817	05N5818	05N5819	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	20	30	40	Volts
Maximum RMS Voltage	V _{RMS}	14	21	28	Volts
Maximum DC Blocking Voltage	V _{DC}	20	30	40	Volts
Maximum Average Forward Rectified Current at T _A =100°C	Io	0.5			Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	60			Amps
Typical Thermal Resistance (Note 3)	R ₀ JA	50			° C/W
	R ₀ JL	15			
Typical Junction Capacitance (Note 1)	CJ	110			pF
Operating Temperature Range	TJ	150			°C
Storage Temperature Range	T _{STG}	-55 to + 150			°C

ELECTRICAL CHARACTERISTICS(@TA=25 °C unless otherwise noted)

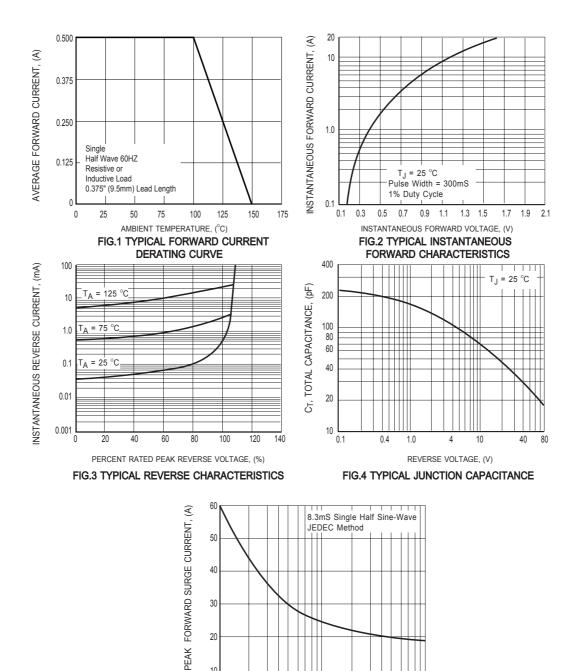
CHARACTERISTICS		SYMBOL	05N5817	05N5818	05N5819	UNITS
Maximum Instantaneous Forward Voltage at 0.5A DC		VF	.30			Volts
Maximum Average Reverse Current	@T _A = 25°C	I _R	1.0			mAmps
at Rated DC Blocking Voltage	@T _A = 100°C	'K		mAmps		

NOTES: 1. Measured at 1 MHz and applied reverse voltage of 4.0 volts.

- 2. "Fully ROHS compliant", "100% Sn plating (Pb-free)".
- 3. Thermal Resistance : At 9.5mm lead lengths, PCB mounted.

2006-11

RATING AND CHARACTERISTICS CURVES (05N5817 THRU 05N5819)



NUMBER OF CYCLES AT 60Hz
FIG.5 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

6 8 10



80 100

40

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