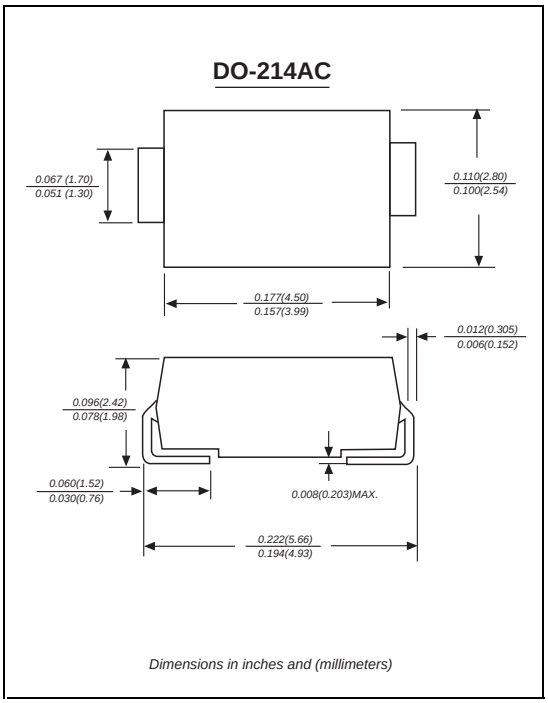
1.0Amp High Voltage Surface Mount Rectifiers DS15

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°C/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: 0.002 ounce, 0.07 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	DS15	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	2800	VOLTS
Maximum RMS voltage	V_{RMS}	1960	VOLTS
Maximum DC blocking voltage	V_{DC}	2800	VOLTS
Maximum average forward rectified current at T_L=75℃	$I_{(AV)}$	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	2.0	Volts
Maximum DC reverse current T_A=25℃ at rated DC blocking voltage T_A=100℃	I_R	5.0 50.0	μA
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	55.0	°C/W
Operating junction and storage temperature range	T_J,T_{STG}	-65 to +150	°C

Note: 1.P.C.B. mounted with 0.2x0.2"(5.0x5.0mm) copper pad areas

Ratings And Characteristic Curves

DS15

FIG. 1- FORWARD CURRENT DERATING CURVE

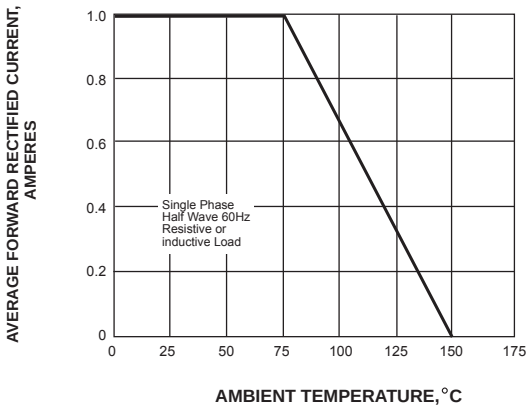


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

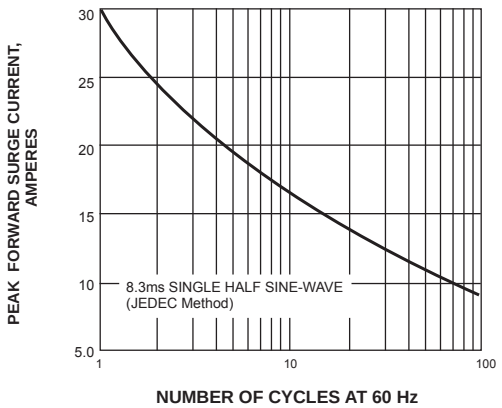


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

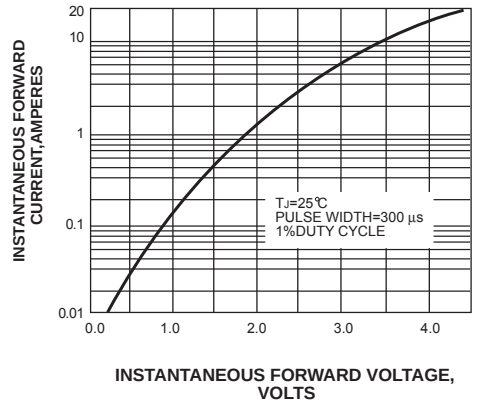


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

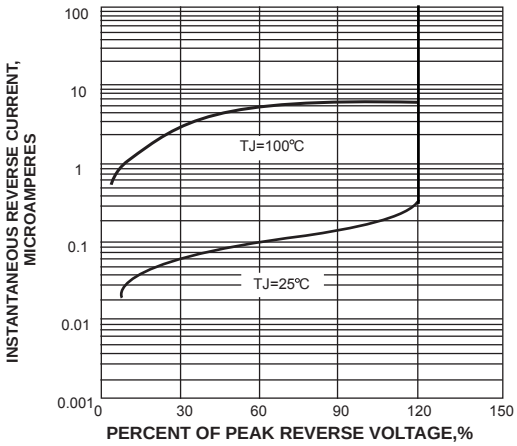


FIG. 5-TYPICAL TRANSIENT THERMAL IMPEDANCE