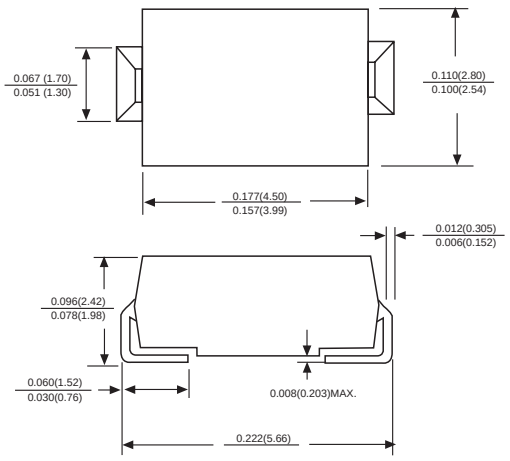
R1200F~R5000F

High Voltage Surface Mount Fast Recovery Rectifiers

Features

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Fast switching for high efficiency
- Open-Junction chip ,silastic passivated
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed 250℃/10 seconds at terminals

DSMA/DO-214AC



Dimensions in inches and (millimeters)

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, 0.07grams

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	R1200F	R1500F	R1800F	R2000F	R2500F	R3000F	R3500F	R4000F	R5000F	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	1200	1500	1800	2000	2500	3000	3500	4000	5000	VOLTS
Maximum RMS voltage	V_{RMS}	840	1050	1260	1400	1750	2100	2450	2800	3500	VOLTS
Maximum DC blocking voltage	V_{DC}	1200	1500	1800	2000	2500	3000	3500	4000	5000	VOLTS
Maximum average forward rectified current 0.375 "(9.5mm) lead length at T_A =55°C	$I_{(AV)}$	0.5			0.2						Amps
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	2.5			4.0		5.0		6.5		Volts
Maximum DC reverse current T_A =25°C at rated DC blocking voltage T_A=100°C	I_R	5.0 50.0									μA
Maximum reverse recovery time (NOTE 1)	t_{rr}	500									ns
Typical junction capacitance (NOTE 2)	C_J	15.0									pF
Typical thermal resistance (NOTE 3)	$R_{\theta JA}$	50.0									°C/W
Operating junction and storage temperature range	T_J,T_{STG}	-65 to +150									°C

Note: 1.Reverse recovery condition I_F =0.5A,I_R =1.0A,Irr=0.25A
2.Measured at 1MHz and applied reverse voltage of 4.0V D.C.
3.P.C.B. mounted with 0.2x0.2"(5.0x5.0mm) copper pad areas