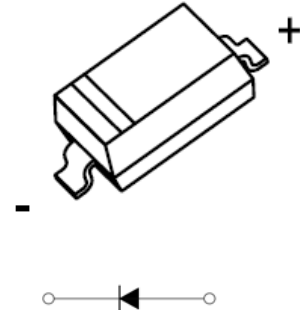




SOD-123 Plastic-Encapsulate Diodes

RS1006D1 FAST RECOVERY DIODE

SOD-123



FEATURES

- High Frequency Rectification
- Surface Mount Package Ideally Suited for Automatic Insertion

MARKING: R6D

MAXIMUM RATINGS ($T_a=25^\circ\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{RRM}	Peak Repetitive Reverse Voltage	600	V
V_{RWM}	Working Peak Reverse Voltage		
$V_{R(RMS)}$	RMS Reverse Voltage	420	V
I_O	Average Rectified Output Current	1	A
I_{FSM}	Non-Repetitive Peak Forward Surge Current @ $t \leq 8.3\text{ms}$	18	A
P_D	Power Dissipation	415	mW
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	301	$^\circ\text{C/W}$
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature	-55~+150	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS($T_a=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse current	I_R	$V_R=600\text{V}$			1	μA
Forward voltage	V_F	$I_F=0.7\text{A}$			1.15	V
		$I_F=1\text{A}$			1.3	V
Reverse recovery time	t_{rr}	$I_F=500\text{mA}, I_R=1\text{A}, I_{rr}=0.25\text{A}$			150	ns
Total capacitance	C_{tot}	$V_R=0\text{V}, f=1\text{MHz}$		15		pF

Typical Characteristics

RS1006D1

