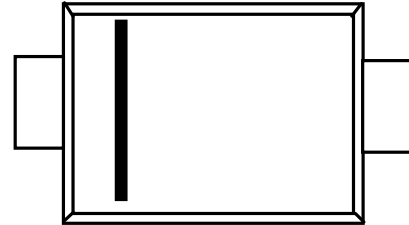


»Features

- Super fast switching time for high efficiency
- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- Epitaxial construction



SMA(DO-214AC)

»General Description

- Case: molded plastic
- Polarity: Color band denotes cathode
- Package: SMA Plastic Package

» Maximum Ratings and Electrical Characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Single phase half wave 60HZ. resistive or inductive load. For capacitive load current derate by 20%

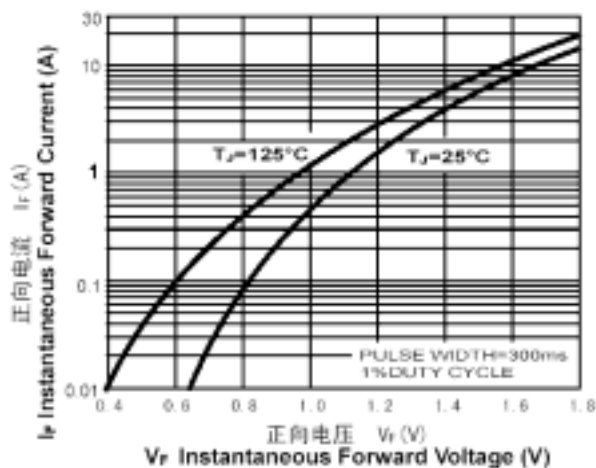
	SYMBOL	RS1A	RS1B	RS1D	RS1G	RS1J	RS1K	RS1M	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current at $T_L = 110^{\circ}C$	$I_{(AV)}$	1.0							A
Peak Forward Surge Current 8.3ms Single half-sine-wave superimposed on rated $T_j = 125^{\circ}C$	I_{FSM}	30							A
Maximum Forward Voltage at 1.0A DC	V_F	1.3							V
Maximum Reverse Current $T_A = 25^{\circ}C$ at Rated DC Blocking Voltage $T_A = 100^{\circ}C$	I_R	10 50							μA
Maximum reverse recovery time (Note 1)	t_{rr}	150				250	500		ns
Typical Junction Capacitance (Note 2)	C_j	15							pF
Typical Thermal Resistance (Note 3)	R_{QJA}	55							$^{\circ}C/W$
Operating Junction Temperature Range	T_j	— 55 to 150							$^{\circ}C$
Storage Temperature Range	T_{STG}	— 55 to 150							$^{\circ}C$

NOTES: 1.Measured with $I_F=0.5A$, $I_R=1A$, $I_{RR}=0.25A$

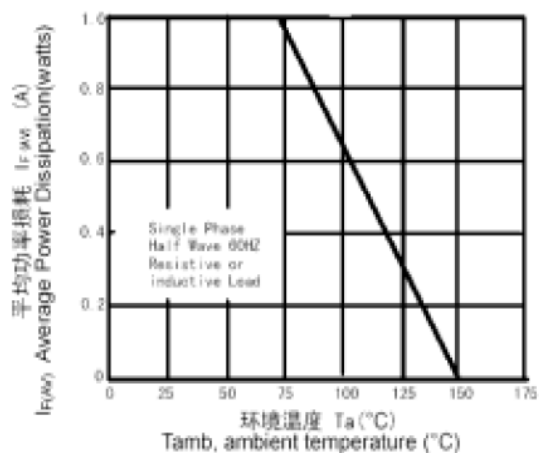
2.Measured at 1.0 MHz and applied reverse voltage of 4.0V DC

»Typical Performance Characteristics (($T_J = 25^\circ\text{C}$, unless otherwise noted))

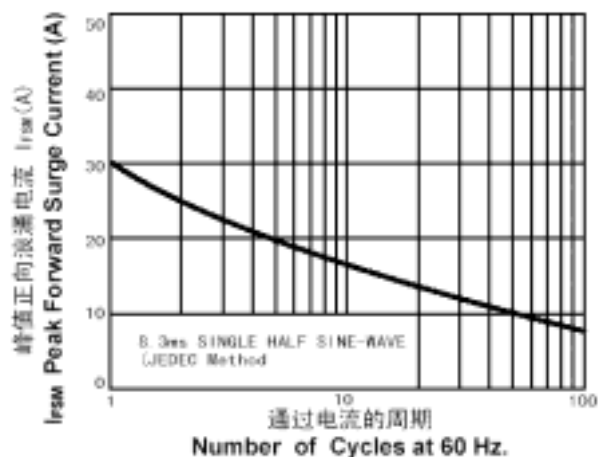
TYPICAL FORWARD CHARACTERISTIC



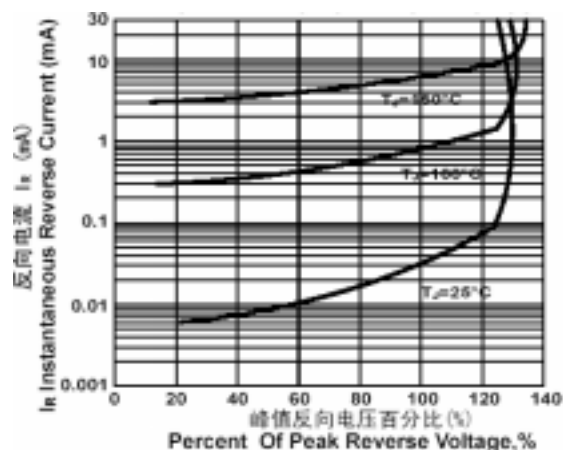
FORWARD CURRENT DERATING CURVE



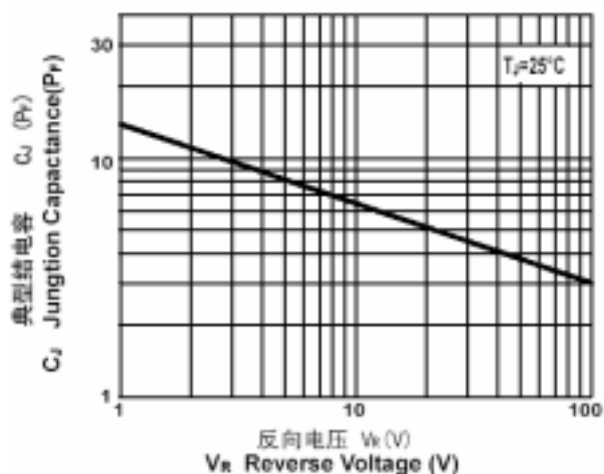
MAXIMUM NON REPETITIVE PEAK FORWARD SURGE CURRENT



TYPICAL REVERSE CHARACTERISTICS

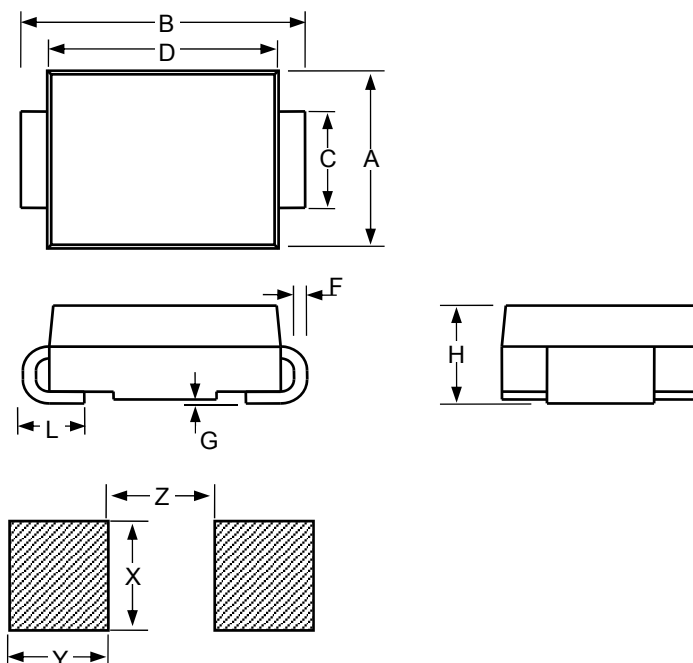


TYPICAL JUNCTION CAPACITANCE



»Package Information

SMA



SMA						
Dimension	Inches			Millimeters		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.098		0.114	2.5		2.9
B	0.194		0.223	4.93		5.66
C	0.051		0.067	1.3		1.7
D	0.157		0.181	3.99		4.6
F	0.006		0.012	0.152		0.305
G	-		0.008	-		0.203
H	0.078		0.095	1.98		2.42
L	0.03		0.06	0.76		1.52
X		0.085			2.16	
Y		0.07			1.78	
Z		0.079			2	

»Ordering information

Part Number	RS1A	RS1B	RS1D	RS1G	RS1J	RS1K	RS1M
Marking	RS1A	RS1B	RS1D	RS1G	RS1J	RS1K	RS1M
Base qty	5K	5K	5K	5K	5K	5K	5K