



DESCRIPTION

The DRS1A~DRS1M are available in SMA Package

ORDERING INFORMATION

Package Type	Part Number
SMA	DRS1A
	DRS1B
	DRS1C
	DRS1D
	DRS1G
	DRS1J
	DRS1K
	DRS1M
Note	2,000pcs/Reel
AiT provides all RoHS Compliant Products	

FEATURES

- Plastic package has underwriters laboratory flammability classification 94V-0
- For surface mounted applications
- Low profile package
- Built-in strain relief, ideal for automated placement
- Glass passivated chip junction
- High temperature soldering:
250°C/10 seconds at terminals
- RoHS Compliant
- Available in SMA Package

MECHANICAL DATA

Case: JEDEC DO-214AC, molded plastic over passivated chip

Terminals: Solder plated, solderable per MIL-STD-750, Method 2026

Polarity: color band denotes cathode end

Weight: 0.002 ounces, 0.064 gram



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified

Parameter	Symbol	DRS 1A	DRS 1B	DRS 1D	DRS 1G	DRS 1J	DRS 1K	DRS 1M	Unit
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 @ $T_L=90^\circ\text{C}$	$I_{F(AV)}$	1.0							A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load	I_{FSM}	30.0							A
Maximum instantaneous forward voltage at 1.0A	V_F	1.30							V
Maximum DC reverse current @ $T_A=25^\circ\text{C}$ at rated DC blocking voltage @ $T_A=125^\circ\text{C}$	I_R	5.0 50.0							μA
Maximum reverse recovery time ^{NOTE1}	t_{rr}	150				250	500		ns
Typical junction capacitance ^{NOTE2}	C_J	10					7.0		pF
Typical thermal resistance ^{NOTE3}	$R_{\theta JA}$ $R_{\theta JL}$	105 32							$^\circ\text{C/W}$
Operating junction and storage temperature range	T_J , T_{STG}	-55 to 150							$^\circ\text{C}$

NOTE1: Reverse recovery time test conditions: $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{rr}=0.25\text{A}$

NOTE2: Measured at 1.0MHz and applied reverse voltage of 4.0 Volts

NOTE3: Thermal resistance from junction to ambient and junction to lead P.C.B. mounted on 0.2"X0.2"(5.0X5.0mm²) copper pad areas



TYPICAL CHARACTERISTICS

Figure 1. Forward Current Derating Curve

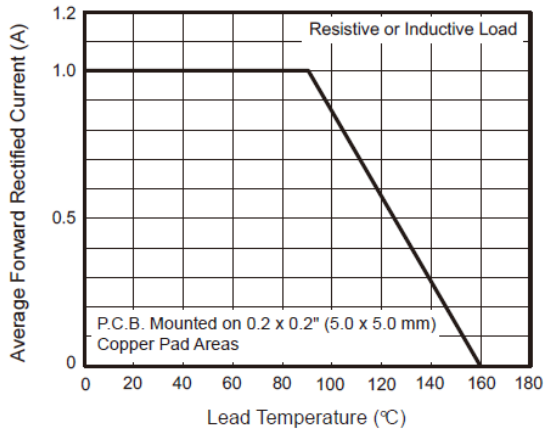


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

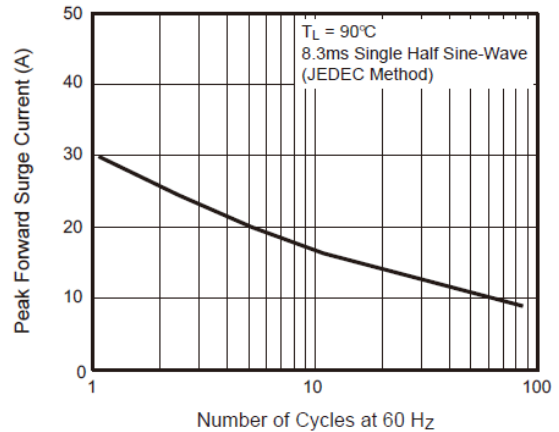


Figure 3. Typical Instantaneous Forward Characteristics

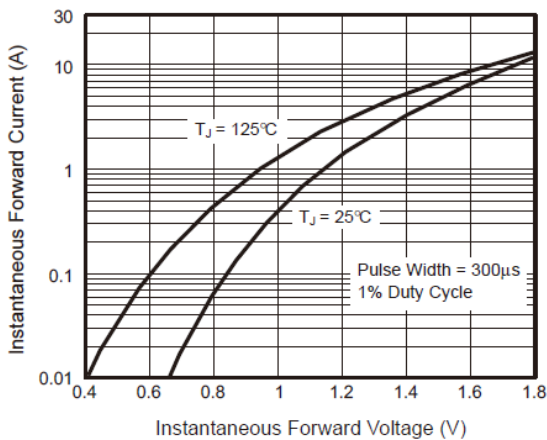


Figure 4. Typical Reverse Characteristics

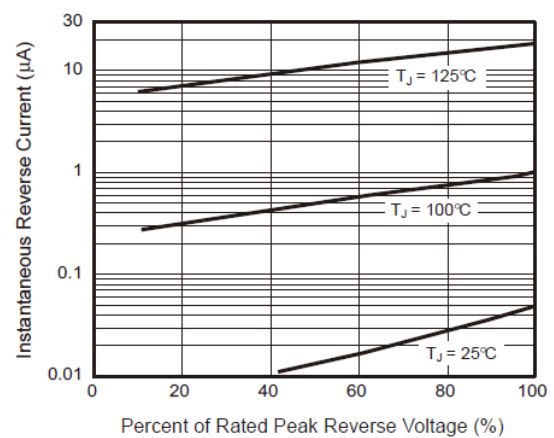


Figure 5. Typical Junction Capacitance

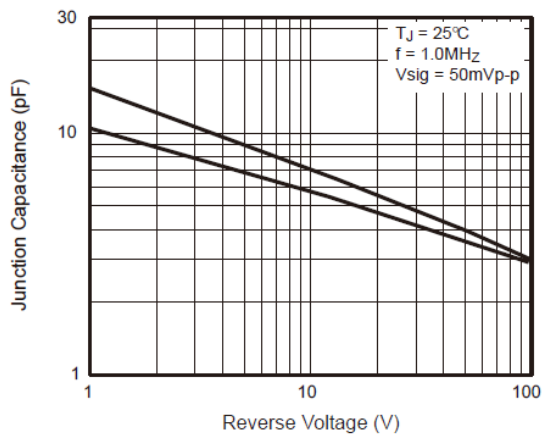
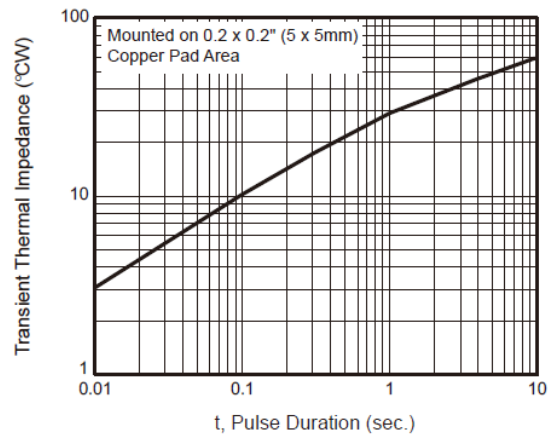


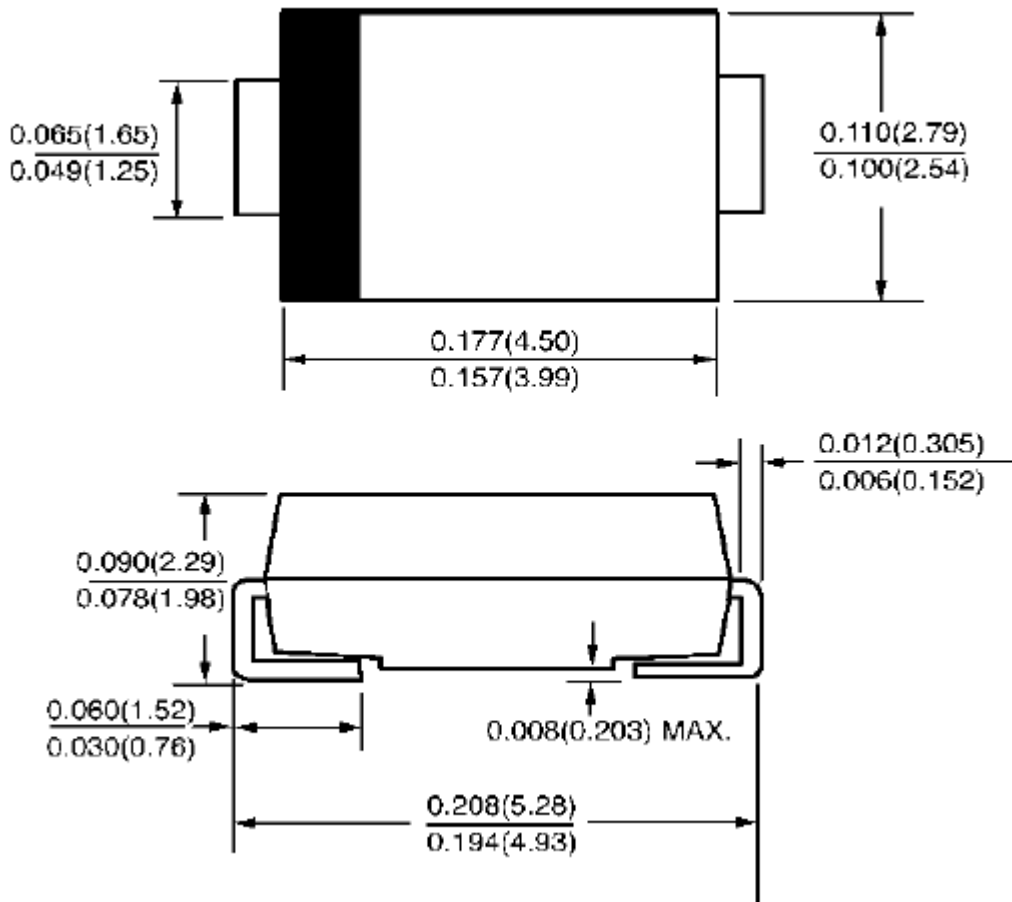
Figure 6. Typical Transient Thermal Impedance





PACKAGE INFORMATION

Dimension in SMA (DO-214AC)Package (Unit: inch/mm)





IMPORTANT NOTICE

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