

S3T

SURFACE MOUNT SILICON RECTIFIER DIODE

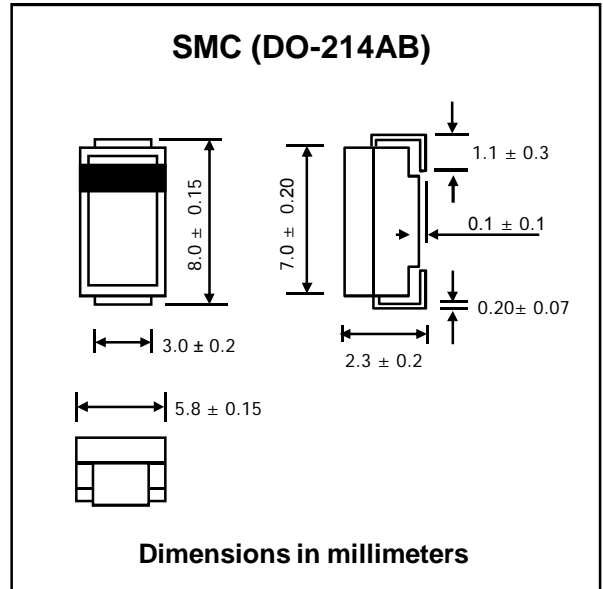
PRV : 1300 Volts
Io : 3.0 Ampere

FEATURES :

- * High surge current capability
- * High reliability
- * Low reverse current
- * Low forward voltage drop
- * Pb / RoHS Free

MECHANICAL DATA :

- * Case : SMC Molded plastic
- * Epoxy : UL94V-O rate flame retardant
- * Lead : Lead Formed for Surface Mount
- * Polarity : Color band denotes cathode end
- * Mounting position : Any
- * Weight : 0.21 gram



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.

RATING	SYMBOL	VALUE	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	1300	V
Maximum Surge Peak Reverse Voltage	V_{RSM}	1300	V
Maximum Average Forward Current, R-Load, $T_T = 100\text{ }^\circ\text{C}$	$I_{F(AV)}$	3.0	A
Maximum Repetitive Peak Forward Current	I_{FRM}	20.0	A
Maximum Peak Forward Surge Current, 50 Hz half sine-wave	I_{FSM}	100	A
60 Hz half sine-wave		110	
Maximum Forward Voltage at $I_F = 3\text{ A}$, $T_j = 25\text{ }^\circ\text{C}$	V_F	1.15	V
Maximum Leakage Current at $V_R = V_{RRM}$, $T_j = 25\text{ }^\circ\text{C}$ at $V_R = V_{RRM}$, $T_j = 100\text{ }^\circ\text{C}$	I_R	5.0	μA
	$I_{R(H)}$	200	
Thermal Resistance, Junction to Ambient Air	R_{thA}	36	K/W
Thermal Resistance, Junction to Terminal	R_{thT}	10	K/W
Operating Junction Temperature Range	T_J	- 50 to + 150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	- 50 to + 150	$^\circ\text{C}$

RATING AND CHARACTERISTIC CURVES (S3T)

FIG.1 - RATED FORWARD CURRENT VS. TERMINALS TEMPERATURE

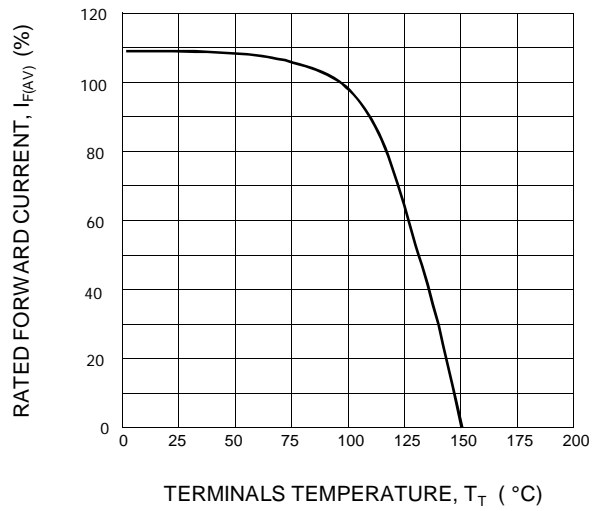


FIG.2 - TYPICAL FORWARD CHARACTERISTICS

