



TAYCHIPST

High Efficient Surface Mount Rectifiers

HS2AA THRU HS2MA

50V-1000V 1.5A

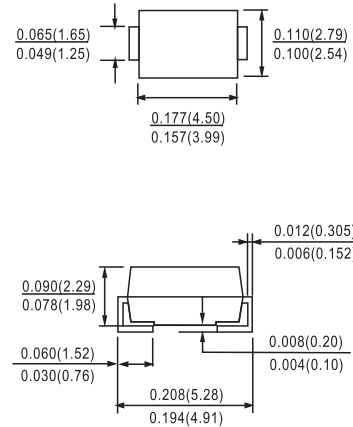
FEATURES

- UL Recognized File # E-326243
- Glass passivated junction chip.
- For surface mounted application
- Low forward voltage drop
- Low profile package
- Built-in stain relief, ideal for automatic placement
- Fast switching for high efficiency
- High temperature soldering:
- 260°C/10 seconds at terminals

MECHANICAL DATA

Case: Molded plastic
 Terminal: Pure tin plated, lead free
 Polarity: Indicated by cathode band
 Packing: 12mm tape per EIA STD RS-481
 Weight: 0.064 grams

DO-214AC(SMA)



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.
 Single phase, half wave, 60 Hz, resistive or inductive load.
 For capacitive load, derate current by 20%

Type Number	Symbol	HS 2AA	HS 2BA	HS 2DA	HS 2FA	HS 2GA	HS 2JA	HS 2KA	HS 2MA	Unit	
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	300	400	600	800	1000	V	
Maximum RMS Voltage	V_{RMS}	35	70	140	210	280	420	560	700	V	
Maximum DC Blocking Voltage	V_{DC}	50	100	200	300	400	600	800	1000	V	
Maximum Average Forward Rectified Current	$I_{F(AV)}$	1.5								A	
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	50								A	
Maximum Instantaneous Forward Voltage (Note 1) @ 1.5A	V_F	1.0			1.3		1.7			V	
Maximum Reverse Current @ Rated VR $T_A=25^\circ C$ $T_A=125^\circ C$	I_R	5 100								μA	
Maximum Reverse Recovery Time (Note 2)	T_{rr}	50					75				nS
Typical Junction Capacitance (Note 3)	C_j	50					30				pF
Typical Thermal Resistance (Note 4)	$R_{\theta JA}$	80								$^\circ C/W$	
Operating Temperature Range	T_J	- 55 to + 150								$^\circ C$	
Storage Temperature Range	T_{STG}	- 55 to + 150								$^\circ C$	

Note 1: Pulse Test with PW=300 usec, 1% Duty Cycle
 Note 2: Reverse Recovery Test Conditions: $I_F=0.5A$, $I_R=1.0A$, $I_{RR}=0.25A$
 Note 3: Measured at 1 MHz and Applied Reverse Voltage of 4.0V D.C.
 Note 4: PCB Mount on 5mm x 5mm Copper Pad Area

RATINGS AND CHARACTERISTIC CURVES HS2AA THRU HS2MA

FIG. 1 FORWARD CURRENT DERATING CURVE

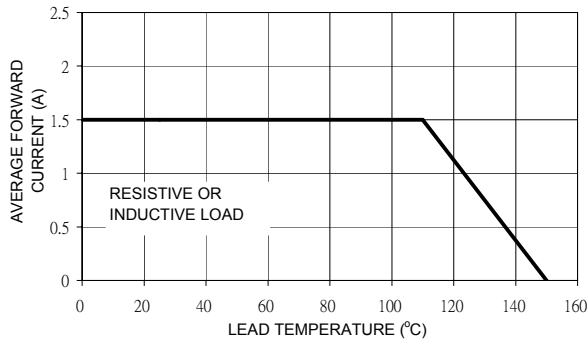


FIG. 2 TYPICAL REVERSE CHARACTERISTICS

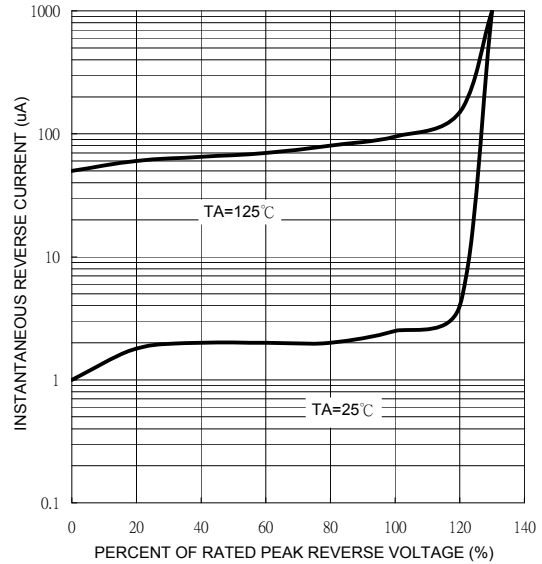


FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

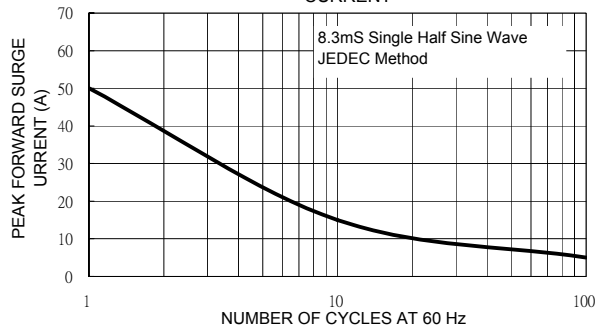


FIG. 4 TYPICAL JUNCTION CAPACITANCE

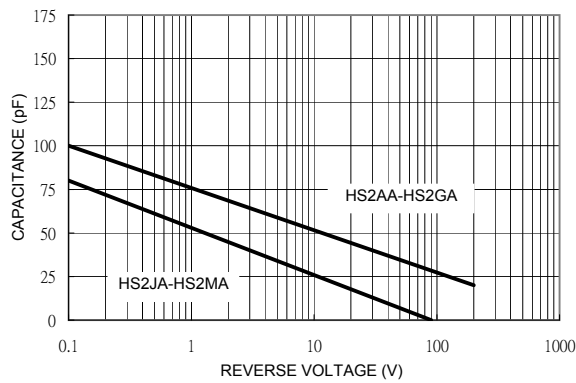


FIG. 5 TYPICAL FORWARD CHARACTERISTICS

