Taiwan Semiconductor

THERMAL PERFORMANCE					
PARAMETER	SYMBOL	TYP	UNIT		
Junction-to-case thermal resistance	$R_{\Theta JC}$	2.3	°C/W		

ELECTRICAL SPECIFICATIONS (T _A = 25°C unless otherwise noted)						
PARAMETER	CONDITIONS	SYMBOL	TYP	МАХ	UNIT	
Forward voltage per diode ⁽¹⁾	I _F = 5A, T _J = 25°C	V _F	-	1.0	V	
	I _F = 10A, T _J = 25°C		-	1.1	V	
Reverse current @ rated V _R per diode ⁽²⁾	T _J = 25°C	I _R	-	10	μΑ	
	T _J =125°C		-	500	μΑ	

Notes:

- 1. Pulse test with PW = 0.3ms
- 2. Pulse test with PW = 30ms

ORDERING INFORMATION				
ORDERING CODE ⁽¹⁾⁽²⁾	PACKAGE	PACKING		
TS10Kx	TS4K	20 / Tube		
TS10KxH	TS4K	20 / Tube		

Notes:

- 1. "x" defines voltage from 400V(TS10K40) to 1000V(TS10K100)
- 2. "H" means AEC-Q101 qualified



CHARACTERISTICS CURVES

 $(T_A = 25^{\circ}C \text{ unless otherwise noted})$

Fig.1 Forward Current Derating Curve

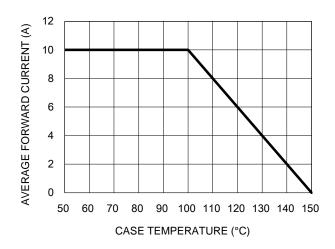


Fig.3 Typical Reverse Characteristics

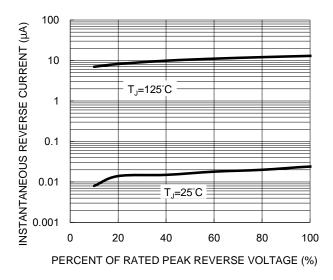


Fig.5 Maximum Non-repetitive Forward Surge Current

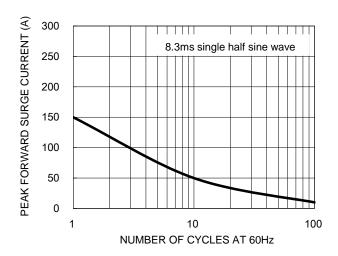


Fig.2 Typical Junction Capacitance

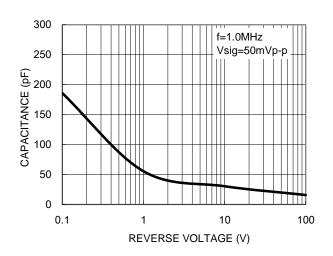
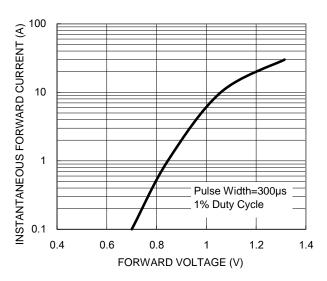


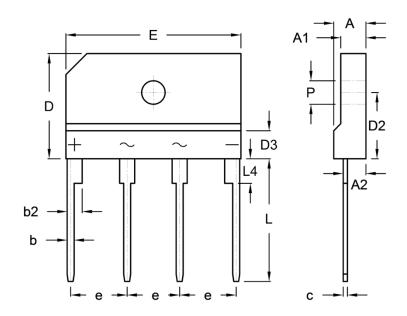
Fig.4 Typical Forward Characteristics





PACKAGE OUTLINE DIMENSIONS

TS4K



DIM.	Unit (mm)		Unit (inch)		
DIW.	Min.	Max.	Min.	Max.	
Α	4.40	4.80	0.173	0.189	
A1	3.40	3.80	0.134	0.150	
A2	3.10	3.40	0.122	0.134	
b	0.90	1.10	0.035	0.043	
b2	2.00	2.30	0.079	0.091	
С	0.50	0.70	0.020	0.028	
D	14.70	15.30	0.579	0.602	
D2	9.30	9.60	0.366	0.378	
D3	3.00	5.00	0.118	0.197	
E	24.70	25.30	0.972	0.996	
е	7.30	7.70	0.287	0.303	
L	17.00	18.00	0.669	0.709	
L4	3.30	3.70	0.130	0.146	
Р	3.10	3.60	0.122	0.142	

MARKING DIAGRAM



P/N = Marking Code G = Green Compound

YWW = Date Code F = Factory Code



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