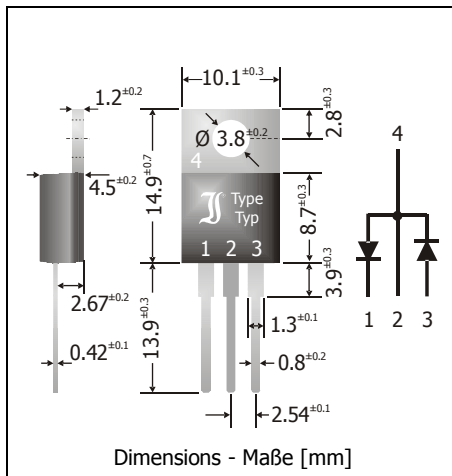


PST1600A ... PST1600M

Silicon Rectifier Diodes – Half Bridge Silizium-Gleichrichterdioden– Halbbrücke

Version 2013-05-07



Nominal current Nennstrom	16 A
Repetitive peak reverse voltage Periodische Spitzensperrspannung	50...1000 V
Plastic case Kunststoffgehäuse	TO-220AB
Weight approx. Gewicht ca.	1.8 g
Plastic material has UL classification 94V-0 Gehäusematerial UL94V-0 klassifiziert	
Standard packaging in tubes Standard Lieferform in Stangen	



Maximum ratings and Characteristics

Grenz- und Kennwerte

Type Typ	Repetitive peak reverse voltage Periodische Spitzensperrspannung V_{RRM} [V] ¹⁾	Surge peak reverse voltage Stoßspitzensperrspannung V_{RSM} [V] ¹⁾	Forward voltage Durchlass-Spannung V_F [V] ¹⁾ , $T_j = 25^\circ\text{C}$	
			$I_F = 5\text{ A}$	$I_F = 8\text{ A}$
PST1600A	50	50	< 1.0	< 1.1
PST1600B	100	100	< 1.0	< 1.1
PST1600D	200	200	< 1.0	< 1.1
PST1600G	400	400	< 1.0	< 1.1
PST1600J	600	600	< 1.0	< 1.1
PST1600K	800	800	< 1.0	< 1.1
PST1600M	1000	1000	< 1.0	< 1.1

Max. average forward current, R-load Dauergrenzstrom mit R-Last	$T_C = 100^\circ\text{C}$ $T_C = 100^\circ\text{C}$	I_{FAV} I_{FAV}	8 A ¹⁾ 16 A ²⁾
Repetitive peak forward current Periodischer Spitzenstrom	$f > 15\text{ Hz}$	I_{FRM}	30 A ³⁾
Peak forward surge current, 50/60 Hz half sine-wave Stoßstrom für eine 50/60 Hz Sinus-Halbwelle	$T_A = 25^\circ\text{C}$	I_{FSM}	135/150 A ¹⁾
Rating for fusing, $t < 10\text{ ms}$ Grenzlastintegral, $t < 10\text{ ms}$	$T_A = 25^\circ\text{C}$	i^2t	90 A ² s ¹⁾
Junction temperature – Sperrschichttemperatur Storage temperature – Lagerungstemperatur		T_j T_s	-50...+150°C -50...+175°C

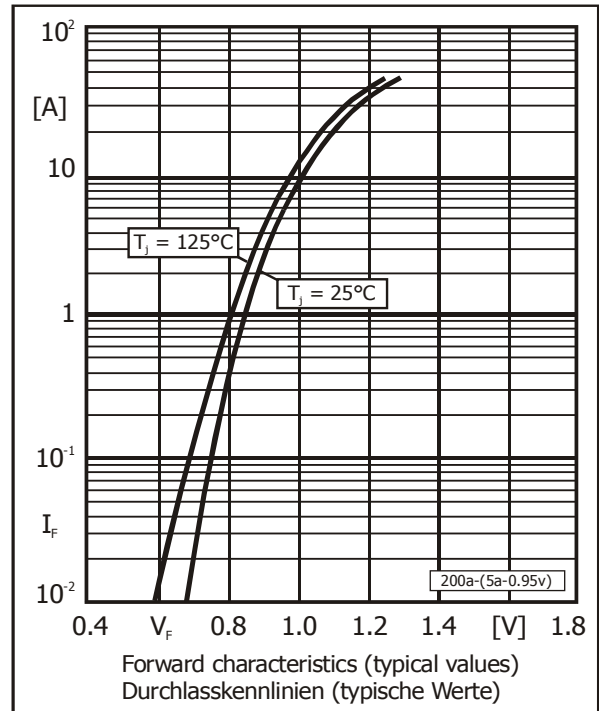
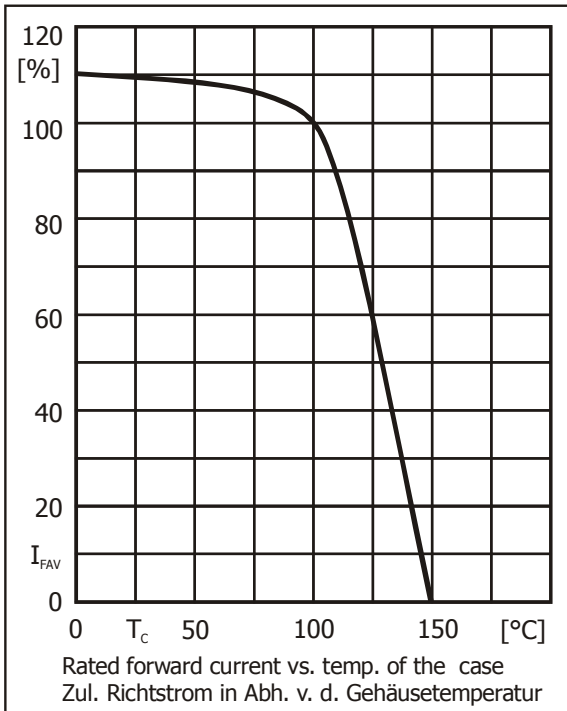
1 Per diode – Pro Diode

2 Output current when operating two devices in a full bridge configuration
Ausgangstrom bei Betrieb zweier Bauteile als Vollbrücke3 Max. temperature of the case $T_C = 100^\circ\text{C}$ – Max. Temperatur des Gehäuses $T_C = 100^\circ\text{C}$

Characteristics

Kennwerte

Leakage current Sperrstrom	$T_j = 25^\circ\text{C}$ $V_R = V_{RRM}$	I_R	< 5 μA
Thermal resistance junction to case Wärmewiderstand Sperrschicht – Gehäuse		R_{thc}	< 2.5 $\text{K/W}^1)$



1 Per diode – Pro Diode