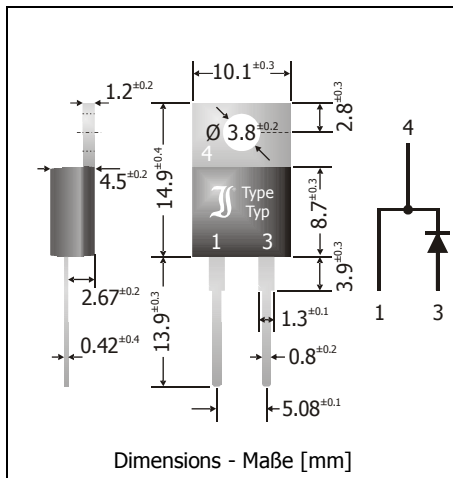


UFT800A ... UFT800M
Ultrafast Silicon Rectifiers – Single Diode
Ultraschnelle Silizium-Gleichrichter – Einzeldiode

Version 2011-02-17



Nominal current Nennstrom	8 A
Repetitive peak reverse voltage Periodische Spitzensperrspannung	50...1000 V
Plastic case Kunststoffgehäuse	TO-220AC
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]	Surge peak reverse voltage Stoßspitzensperrspannung V_{RSM} [V]	Forward voltage Durchlass-Spannung V_F [V] ¹⁾	
			$I_F = 5\text{ A}$	$I_F = 8\text{ A}$
UFT800A	50	50	< 0.9	< 1.0
UFT800B	100	100	< 0.9	< 1.0
UFT800C	150	150	< 0.9	< 1.0
UFT800D	200	200	< 0.9	< 1.0
UFT800F	300	300	< 1.0	< 1.1
UFT800G	400	400	< 1.0	< 1.1
UFT800J	600	600	< 1.0	< 1.1
UFT800K	800	800	< 1.5	< 1.7
UFT800M	1000	1000	< 1.5	< 1.7

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

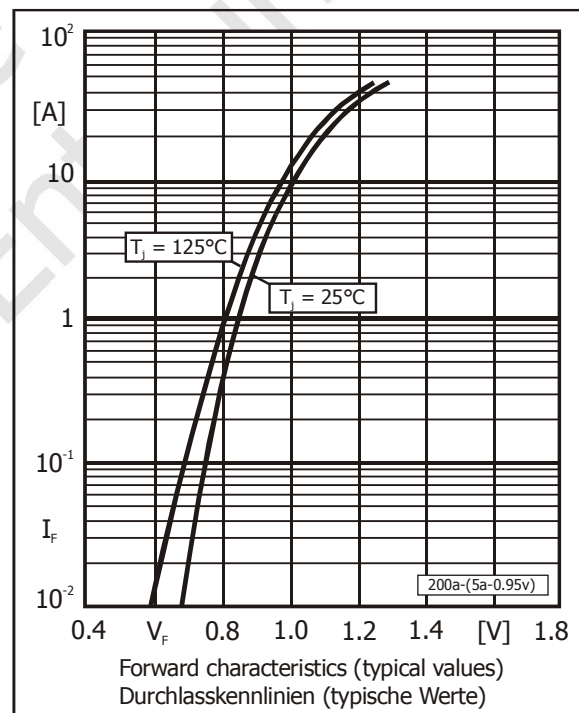
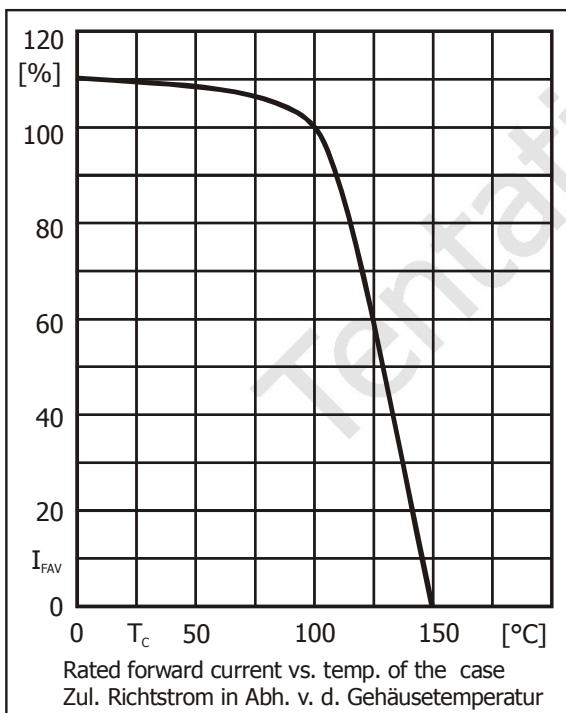
1 $T_j = 25^\circ\text{C}$ 2 Max. temperature of the case $T_C = 100^\circ\text{C}$ – Max. Temperatur des Gehäuses $T_C = 100^\circ\text{C}$

Characteristics

Kennwerte

Type Typ	Reverse recovery time Sperrverzugszeit	Reverse recovery time Sperrverzugszeit
	$T_j = 25^\circ\text{C}$	
	$t_{rr} [\text{ns}]^1)$	$t_{rr} [\text{ns}]^2)$
UFT800A ... UFT800D	< 25	< 35
UFT800G ... UFT800J	< 35	< 45
UFT800K ... UFT800M	< 75	< 100

Leakage current Sperrstrom	$T_j = 25^\circ\text{C}$ $V_R = V_{RRM}$	I_R	< 10 μA
Thermal resistance junction to case Wärmewiderstand Sperrschicht – Gehäuse		R_{thC}	< 2.5 K/W



1 $I_F = 0.5 \text{ A}$ through/über $I_R = 1 \text{ A}$ to/auf $I_R = 0.25 \text{ A}$
2 $I_F = 1.0 \text{ A}$, $di/dt = -50 \text{ A}/\mu\text{s}$, $V_R = 30 \text{ V}$