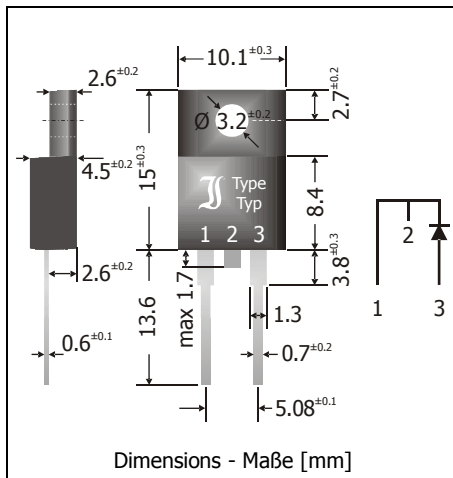


UFJ800A ... UJ800J

Superfast Efficient Rectifiers – Single Diode Superschnelle Hocheffizienz-Gleichrichter – Einzeldiode

Version 2013-05-23



Nominal current Nennstrom	8 A
Repetitive peak reverse voltage Periodische Spitzensperrspannung	50...600 V
Plastic case Kunststoffgehäuse	ITO-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⁾	
			$I_F = 5$ A	$I_F = 8$ A
UFJ800A	50	50	< 0.9	< 1.0
UFJ800B	100	100	< 0.9	< 1.0
UFJ800C	150	150	< 0.9	< 1.0
UFJ800D	200	200	< 0.9	< 1.0
UFJ800F	300	300	< 1.15	< 1.25
UFJ800G	400	400	< 1.15	< 1.25
UFJ800H	500	500	< 1.6	< 1.75
UFJ800J	600	600	< 1.6	< 1.75

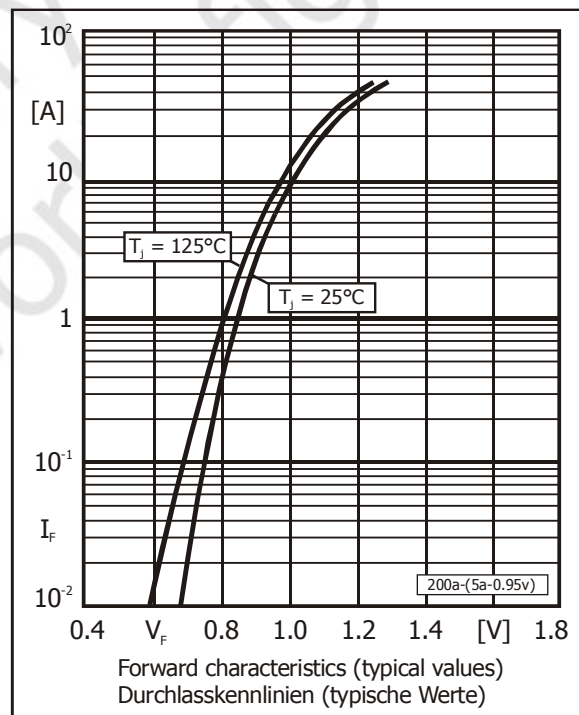
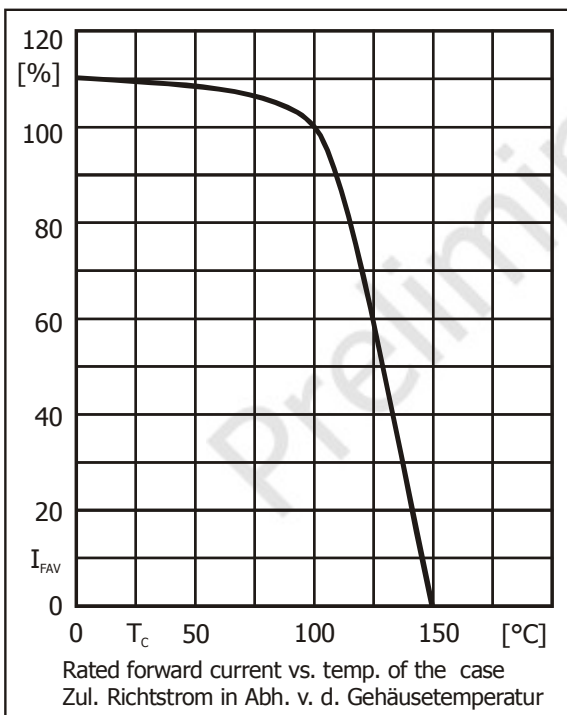
Max. average forward rectified current, R-load Dauergrenzstrom in Einwegschaltung mit R-Last	$T_C = 100^\circ\text{C}$	I_{FAV}	8 A
Repetitive peak forward current Periodischer Spitzenstrom	$f > 15$ Hz	I_{FRM}	22 A ²⁾
Peak forward surge current, 50/60 Hz half sine-wave Stoßstrom für eine 50/60 Hz Sinus-Halbwelle	$T_A = 25^\circ\text{C}$	I_{FSM}	112/125 A
Rating for fusing, $t < 10$ ms Grenzlastintegral, $t < 10$ ms	$T_A = 25^\circ\text{C}$	i^2t	62 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
	$T_j = 25^\circ\text{C}$	$T_j = 25^\circ\text{C}$
	$t_{rr} [\text{ns}]^3)$	$t_{rr} [\text{ns}]^4)$
UFJ800A ... UFJ800D	< 25	< 35
UFJ800F ... UFJ800J	< 35	< 45

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 K/W



3 $I_F = 0.5 \text{ A}$ through/über $I_R = 1 \text{ A}$ to/auf $I_R = 0.25 \text{ A}$

4 $I_F = 1.0 \text{ A}$, $di/dt = -50 \text{ A}/\mu\text{s}$, $V_R = 30 \text{ V}$