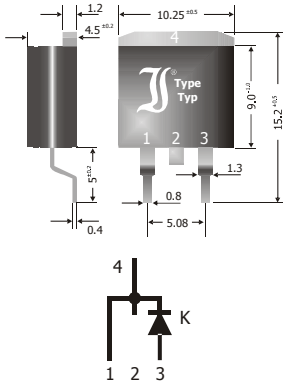
UGB8AT ... UGB8JT

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

Version 2012-10-09



Dimensions - Maße [mm]

Nominal current Nennstrom	8 A
Repetitive peak reverse voltage Periodische Spitzensperrspannung	50...600 V
Plastic case Kunststoffgehäuse	TO-263AB D^2 PAK (D2)
Weight approx. Gewicht ca.	1.6 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
UGB8AT	50	50	< 0.9	< 1.0
UGB8BT	100	100	< 0.9	< 1.0
UGB8DT	200	200	< 0.9	< 1.0
UGB8GT	400	400	< 1.15	< 1.25
UGB8JT	600	600	< 1.6	< 1.75

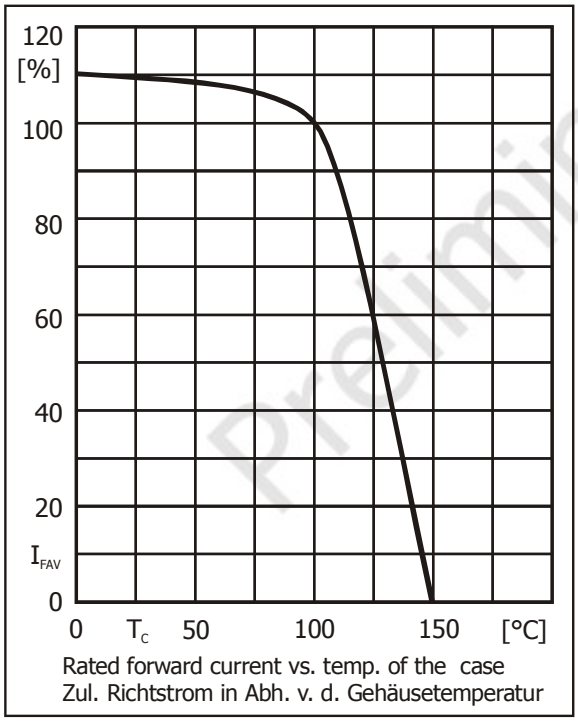
Max. average forward rectified current, R-load Dauergrenzstrom in Einwegschaltung mit R-Last	T_C = 100°C	I_{FAV}	8 A
Repetitive peak forward current Periodischer Spitzenstrom	f > 15 Hz	I_{FRM}	22 A [2])
Peak forward surge current, 50/60 Hz half sine-wave Stoßstrom für eine 50/60 Hz Sinus-Halbwelle	T_A = 25°C	I_{FSM}	112/125 A
Rating for fusing, t < 10 ms Grenzlastintegral, t < 10 ms	T_A = 25°C	i^2t	62 A^2s
Junction temperature – Sperrschichttemperatur Storage temperature – Lagerungstemperatur		T_j T_S	-50...+150°C -50...+175°C

1 T_j = 25°C
2 Max. temperature of the case T_C = 100°C – Max. Temperatur des Gehäuses T_C = 100°C

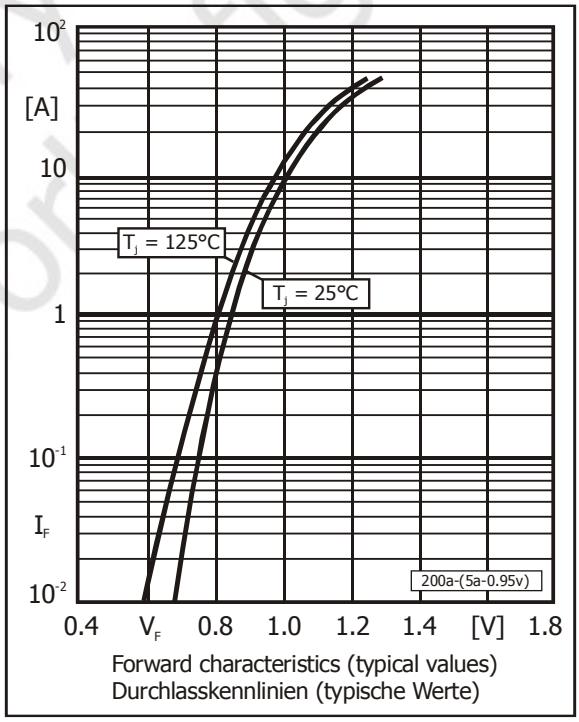
Characteristics **Kennwerte**

Type Typ	Reverse recovery time Sperrverzugszeit	Reverse recovery time Sperrverzugszeit
T_j = 25°C	t_{rr} [ns] [1])	t_{rr} [ns] [2])
UGB8AT ... UGB8DT	< 25	< 35
UGB8GT ... UGB8JT	< 35	< 45

Leakage current Sperrstrom	T_j = 25°C $V_R = V_{RRM}$	I_R	< 5 µA
Thermal resistance junction to case Wärmewiderstand Sperrschicht – Gehäuse		R_{thC}	< 2.5 K/W



Rated forward current vs. temp. of the case
Zul. Richtstrom in Abh. v. d. Gehäusetemperatur



Forward characteristics (typical values)
Durchlasskennlinien (typische Werte)

1 I_F = 0.5 A through/über I_R = 1 A to/auf I_R = 0.25 A
2 I_F = 1.0 A, di/dt = -50 A/µs, V_R = 30 V

