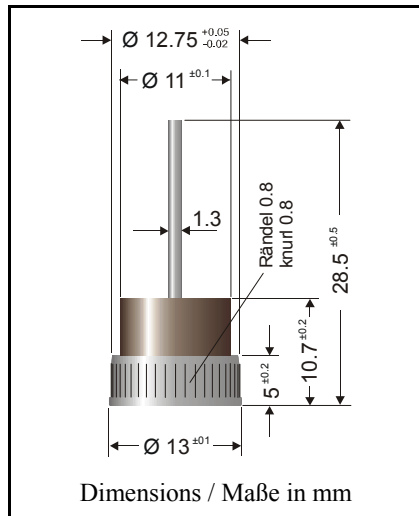


**Silicon Protectifiers
with TVS characteristics
High-temperature diodes**

**Silizium Schutzgleichrichter
mit Begrenzereigenschaften
Hochtemperaturdioden**



Nominal current – Nennstrom	50 A
Nominal breakdown voltage Nominale Abbruch-Spannung	19.8 ... 51.7 V
Metal press-fit case with plastic cover Metall-Einpreßgehäuse mit Plastik-Abdeckung	
Weight approx. – Gewicht ca.	10 g
Casting compound has UL classification 94V-0 Vergußmasse UL94V-0 klassifiziert	
Standard packaging: bulk Standard Lieferform: lose im Karton	

Maximum ratings

Grenzwerte

Type / Typ Wire to / Draht an		Breakdown voltage Abbruch-Spannung $I_T = 100 \text{ mA}$ $V_{BRmin} \text{ [V]}$ V_{BRmax}		Reverse voltage Sperrspannung $I_R = 5 \mu\text{A}$ $V_R \text{ [V]}$	Max. clamping voltage Max. Begrenzerspanng. at / bei I_{PP} , $t_p = 1 \text{ ms}$ $V_C \text{ [V]}$ $I_{PP} \text{ [A]}$	
Anode	Cathode					
BYZ 50A22	BYZ 50K22	19.8	24.2	> 17.8	31,9	242
BYZ 50A27	BYZ 50K27	24.3	29.7	> 21.8	39,1	192
BYZ 50A33	BYZ 50K33	29.7	36.3	> 26.8	47,7	160
BYZ 50A39	BYZ 50K39	35.1	42.9	> 31.6	56,4	134
BYZ 50A47	BYZ 50K47	42.3	51.7	> 38.1	67,8	112

Max. average forward rectified current, R-load Dauergrenzstrom in Einwegschaltung mit R-Last	$T_C = 150^\circ\text{C}$	I_{FAV}	50 A
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}	400 / 450 A
Rating for fusing – Grenzlasterintegral, $t < 10 \text{ ms}$	$T_A = 25^\circ\text{C}$	i^2t	800 A ² s
Forward voltage – Durchlaßspannung	$T_j = 25^\circ\text{C}$	$I_F = 50 \text{ A}$	V_F < 1.1 V
Operating junction temperature – Sperrschichttemperatur		T_j	– 50...+215°C
Storage temperature – Lagerungstemperatur		T_s	– 50...+215°C

Max. junction temperature in case of "Load Dump"
Max. Sperrschichttemperatur bei "Load Dump"

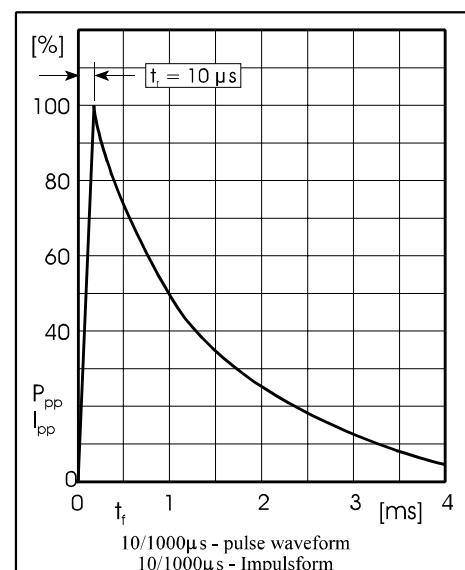
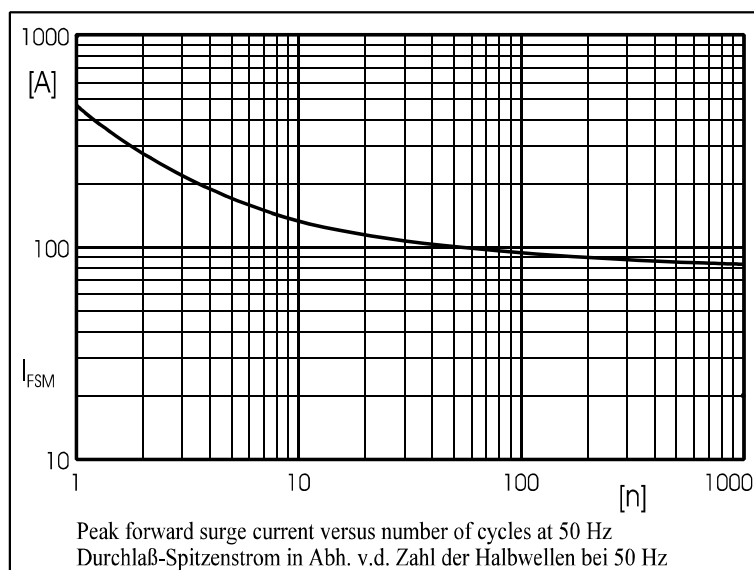
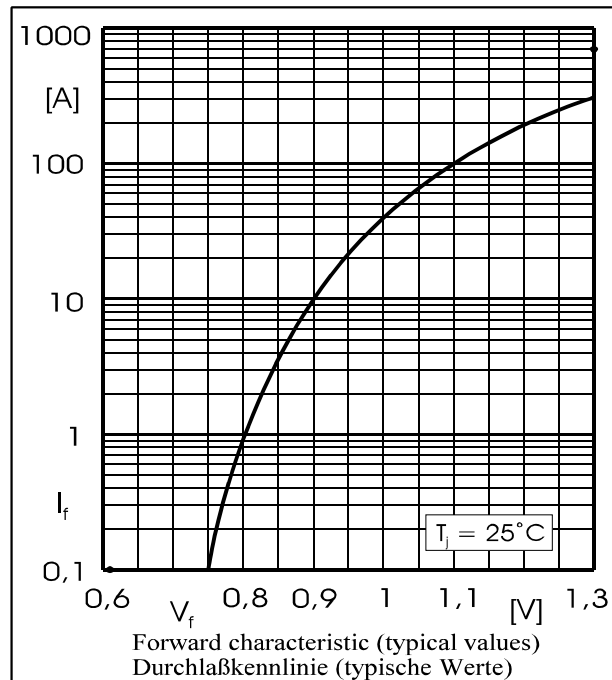
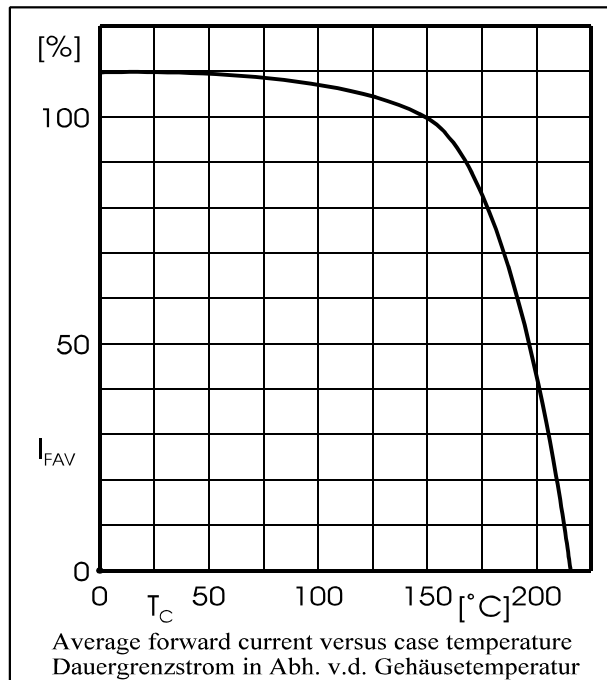
T_{jmax} +280°C

Thermal resistance junction to case
Wärmewiderstand Sperrschicht – Gehäuse

R_{thC} < 0.6 K/W

Maximum pressure – Maximaler Einpreßdruck

7 kN



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