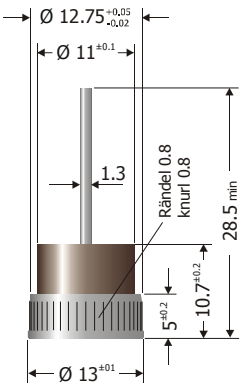
BYP35A05 ... BYP35A6, BYP35K05 ... BYP35K6

Silicon-Press-Fit-Diodes – High Temperature Diodes
Silizium-Einpress-Dioden – Hochtemperatur-Dioden

Version 2011-11-18



Dimensions - Maße [mm]

Nominal Current Nennstrom	35 A
Repetitive peak reverse voltage Periodische Spitzensperrspannung	50 ... 600 V
Metal press-fit case with plastic cover Metall-Einpressgehäuse mit Plastik-Abdeckung	
Weight approx. Gewicht ca.	10 g
Compound has classification UL94V-0 Vergussmasse nach UL94V-0 klassifiziert	
Standard packaging: bulk Standard Lieferform: lose im Karton	

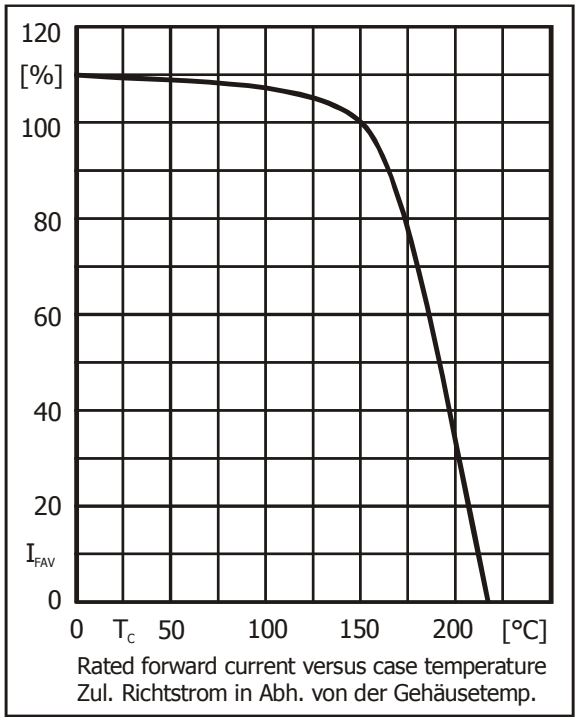
Maximum ratings **Grenzwerte**

Type / Typ Wire to / Draht an		Repetive peak reverse voltage Periodische Spitzensperrspannung V_{RRM} [V]	Surge peak reverse voltage Stoßspitzensperrspannung V_{RSM} [V]
Anode	Cathode		
BYP35A05	BYP35K05	50	60
BYP35A1	BYP35K1	100	120
BYP35A2	BYP35K2	200	240
BYP35A3	BYP35K3	300	360
BYP35A4	BYP35K4	400	480
BYP35A6	BYP35K6	600	700

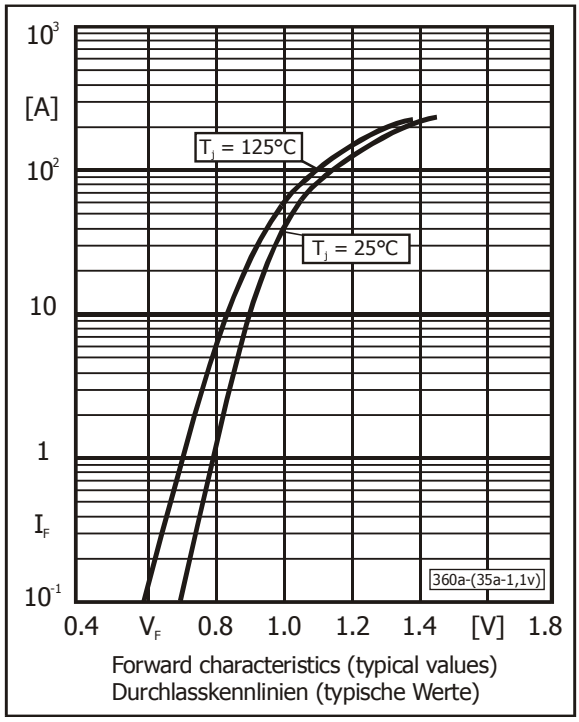
Max. average forward rectified current, R-load Dauergrenzstrom in Einwegschaltung mit R-Last	T_C = 150°C	I_{FAV}	35 A
Repetitive peak forward current Periodischer Spitzenstrom	f > 15 Hz	I_{FRM}	130 A [1])
Peak forward surge current, 50/60 Hz half sine-wave Stoßstrom für eine 50/60 Hz Sinus-Halbwelle	T_A = 25°C	I_{FSM}	360/400 A
Rating for fusing, t < 10 ms Grenzlastintegral, t < 10 ms	T_A = 25°C	i^2t	660 A^2s
Operating junction temperature – Sperrschichttemperatur Storage temperature – Lagerungstemperatur		T_j T_S	-50...+215°C -50...+215°C

1 Max. case temperature T_C = 150°C – Max. Gehäusetemperatur T_C = 150°C

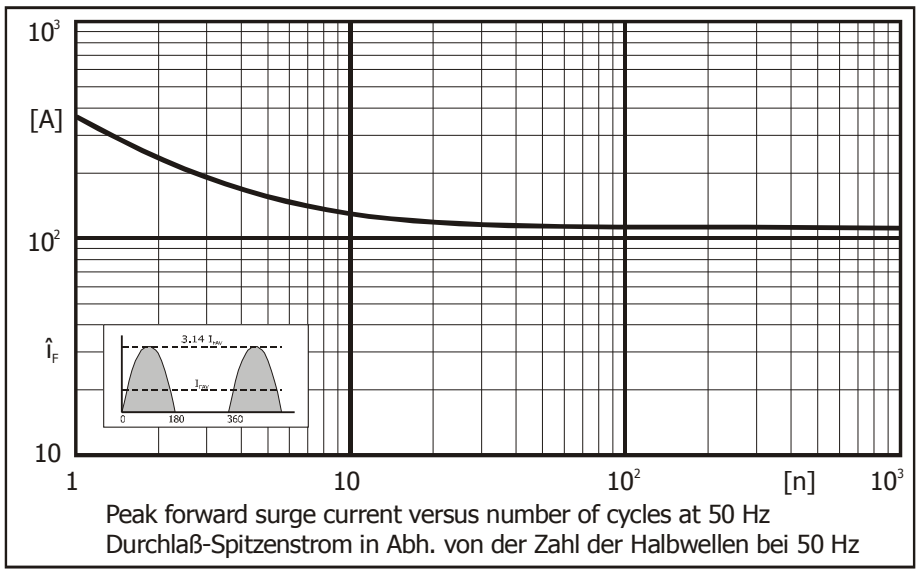
Characteristics			**Kennwerte**
Forward Voltage – Durchlass-Spannung	T_j = 25°C I_F = 35 A	V_F	< 1.1 V
Leakage Current – Sperrstrom	T_j = 25°C V_R = V_{RRM}	I_R	< 100 µA
Thermal Resistance Junction – Case Wärmewiderstand Sperrschicht – Gehäuse		R_{thC}	< 0.8 K/W
Maximum pressing force Maximaler Einpressdruck		F_{pmax}	7 kN



Rated forward current versus case temperature
Zul. Richtstrom in Abh. von der Gehäusetemp.



Forward characteristics (typical values)
Durchlasskennlinien (typische Werte)



Peak forward surge current versus number of cycles at 50 Hz
Durchlaß-Spitzenstrom in Abh. von der Zahl der Halbwellen bei 50 Hz