



TAYCHIPST

High Voltage Silicon Rectifier Diodes

BY 4 THRU BY 16

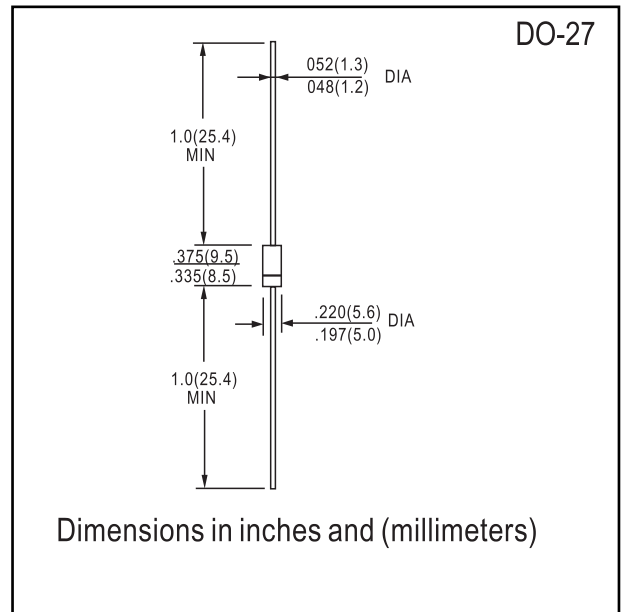
4000V-16000V 1.0A-0.3A

FEATURES

- * Low forward voltage drop
- * High current capability
- * High reliability
- * High surge current capability

MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Lead: Axial leads, solderable per MIL-STD-202, method 208 guaranteed
- * Polarity: Color band denotes cathode end
- * Mounting position: Any
- * Weight: 1.10 grams



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

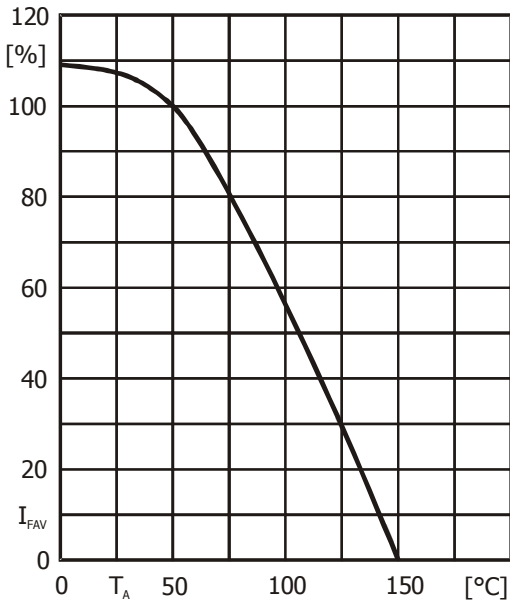
Maximum ratings and Characteristics

Type	Rep. peak reverse volt. Period. Spitzensperrspg. V_{RRM} [V]	Surge peak reverse volt. Stoßspitzensperrspg. V_{RSM} [V]	Max. forward current Dauergrenzstrom I_{FAV} [A] ¹⁾	Forward volt. Durchlass-Spg. V_F [V] ²⁾
BY4	4000	4000	1.0	< 4.0
BY6	6000	6000	1.0	< 6.0
BY8	8000	8000	0.5	< 8.0
BY12	12000	12000	0.5	< 10.0
BY16	16000	16000	0.3	< 15.0

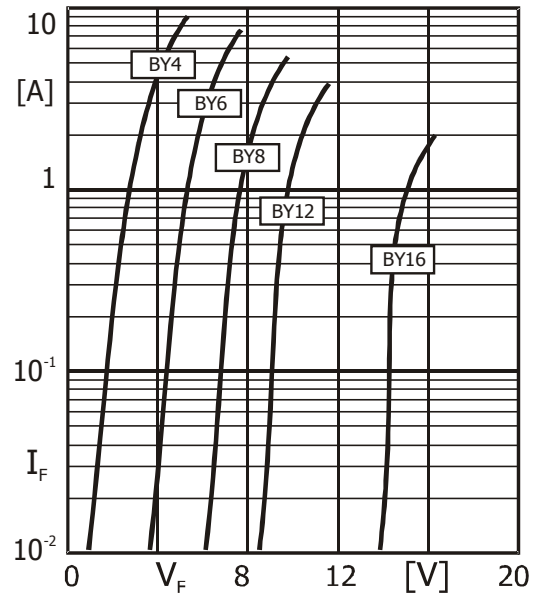
Leakage Current Sperrstrom	$T_j = 25^\circ\text{C}$ $T_j = 100^\circ\text{C}$	$V = V_{RRM}$ $V = V_{RRM}$	< 1 μA < 25 μA
Peak forward surge current, 50 Hz half sine-wave Stoßstrom für eine 50 Hz Sinus-Halbwellen	$T_A = 25^\circ\text{C}$	I_{FSM}	100 A
Rating for fusing, $t < 10$ ms Grenzlantintegral, $t < 10$ ms	$T_A = 25^\circ\text{C}$	i^2t	50 A^2s
Junction temperature – Sperrschichttemperatur Storage temperature – Lagerungstemperatur		T_j T_s	-50...+150°C -50...+150°C
Thermal resistance junction to ambient air Wärmewiderstand Sperrschicht – umgebende Luft		θ_{thA}	< 25 $\text{K/W}^1)$



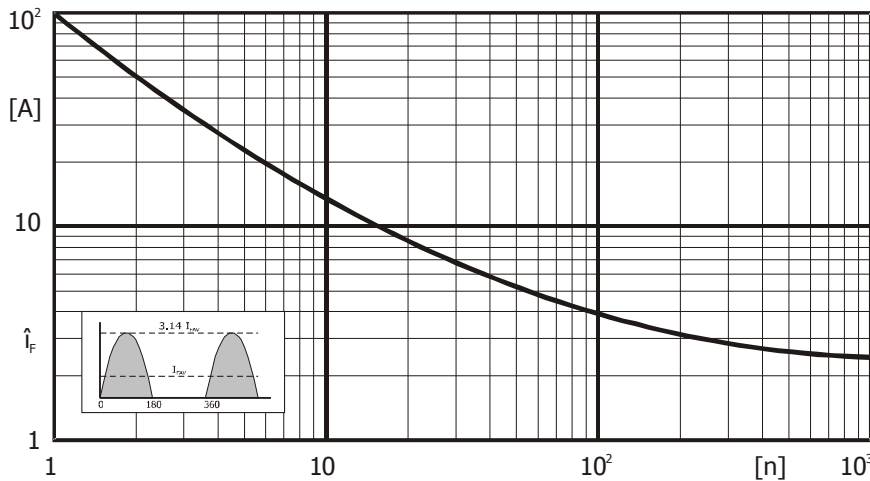
RATINGS AND CHARACTERISTIC CURVES BY 4 THRU BY 16



Rated forward current versus ambient temperature¹⁾
Zul. Richtstrom in Abh. von der Umgebungstemp.¹⁾



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