

# Technical Data

## DIODE



### maximum ratings

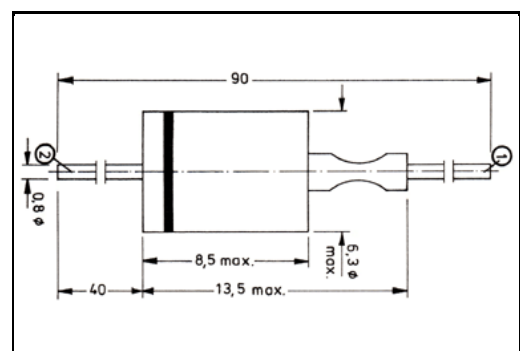
Voltage, Reverse (VBR)	24.0	V	NO.	1N5642A
Voltage, Reverse Peak (VRM)	33.2	V	TYPE	SUPPRESSOR
Current at VR = 0V (IO)		A		
Current Average Rectified (IF)		A		
Current, Surge Peak (IPM)	45.0	A	CASE	DO-13
Current, Surge (IFM) at tp = 8.3 ms	200.0	A		
Max. Power Dissipation (PT) at TA = 75 °C	1.0	W		
Max. Thermal Resistance (Rth J-A)	100.0	°C/W		
Max. Junction Temperature (TJ)	175.0	°C		

### PERFORMANCE CHARACTERISTICS at T<sub>c</sub> = 25°C, unless otherwise noted

NO.	SYMBOL	CONDITIONS	MIN.	MAX.	UNITS
1.	IR	VR = 20.5 V	-	5.0	μA
2.	VBR	IR = 1.0 mA	22.8	25.2	V
3.	VF	IF = 1.0 A (1)	-	1.5	V
4.	PBR	tp = 1.0 ms	-	1.5	kW
5.	VCL	IP = 45.0 A, tp = 1.0 ms	-	33.2	V
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Notes (1) pulse-tested tp ≤ 300 μs, duty cycle ≤ 2 %

DIMENSIONS  
in mm



Marking 1N5642A  
Customer GENERAL PURPOSE