



# Single Phase Diode Bridge KBPC10



## Key Parameters

$I_O$	=	10	A
$V_{RRM}$	=	50 - 1000	V
$I_{FSM}$	=	180	A
$I^2t$	=	135	mΩ

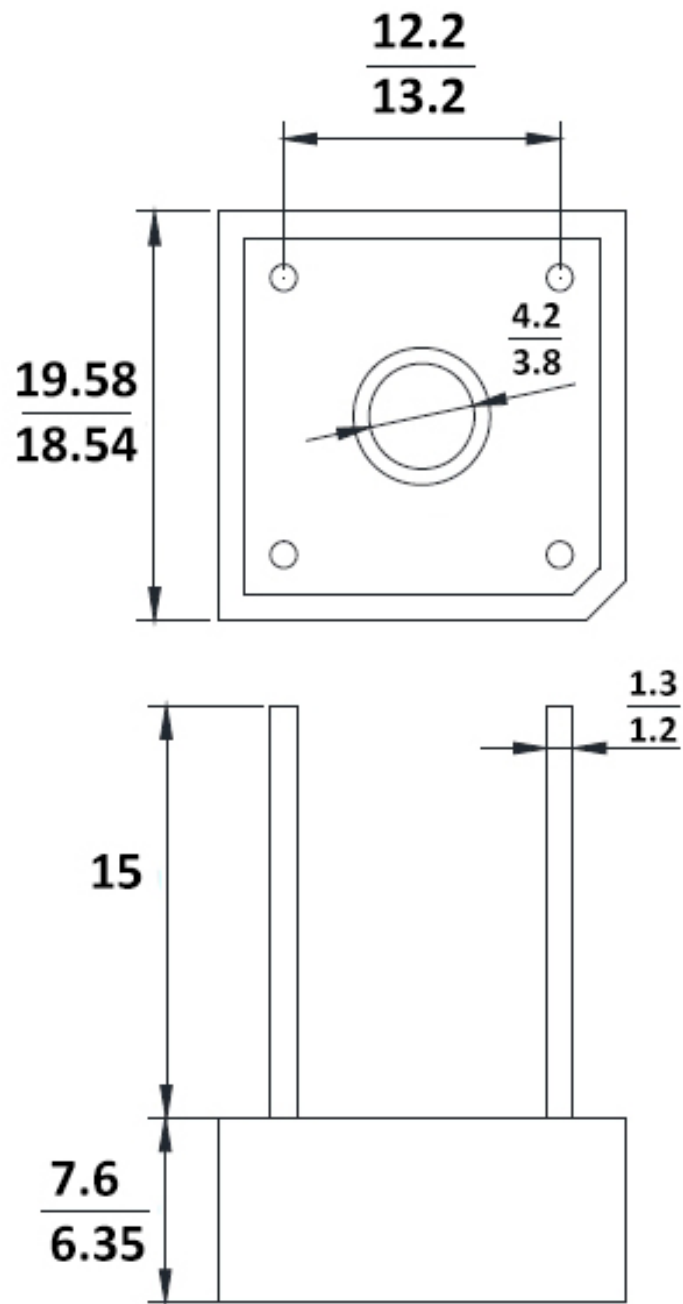
## Properties

- Compact construction
- High surge current capability
- Low reverse leakage current
- Low power loss, high efficiency

## MAXIMUM ALLOWABLE RATINGS AND ELECTRICAL CHARACTERISTICS

Symbols, parameters and values									Unit
$V_{RRM}$	Repetitive peak reverse voltage	50	100	200	400	600	800	1000	V
$I_O$	Average rectified output current	$T_C = 40\text{ °C}$						10	A
$I_{FSM}$	Non repetitive peak forward surge current	$t_p = 8.3\text{ ms}$ $T_C = 25\text{ °C}$						180	A
$V_{FM}$	Forward voltage per leg	$I_{FM} = 5\text{ A}$						1.1	V
$I_{RRM}$	Peak reverse current At rated DC blocking Voltage							10	μA
$I^2t$	$I^2t$ rating for fusing	$t_p = 8.3\text{ ms}$ $T_C = 25\text{ °C}$						135	A <sup>2</sup> s
$R_{th(jc)}$	Typical thermal resistance per leg							19	°C/W
$T_j, T_{STG}$	Operation and storage temperature range							-55...+150	°C

## DIMENSIONS



## TOPOLOGY OF INTERNAL CONNECTION

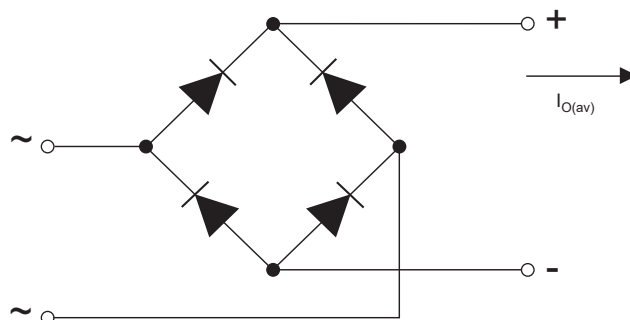


FIG1:Io-Ta Curve

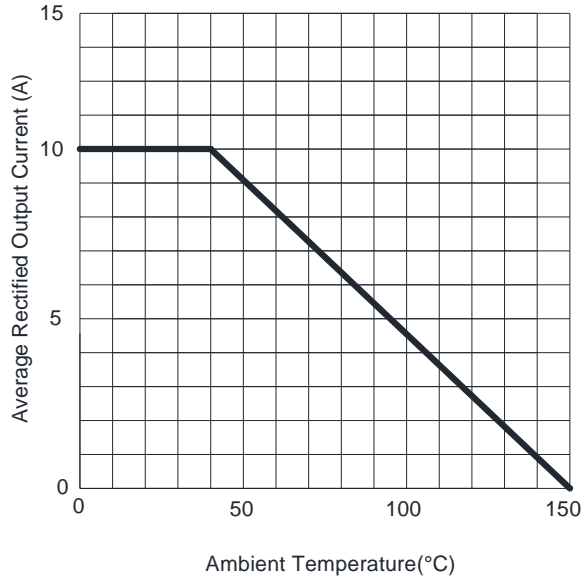


FIG2:Surge Forward Current Capability

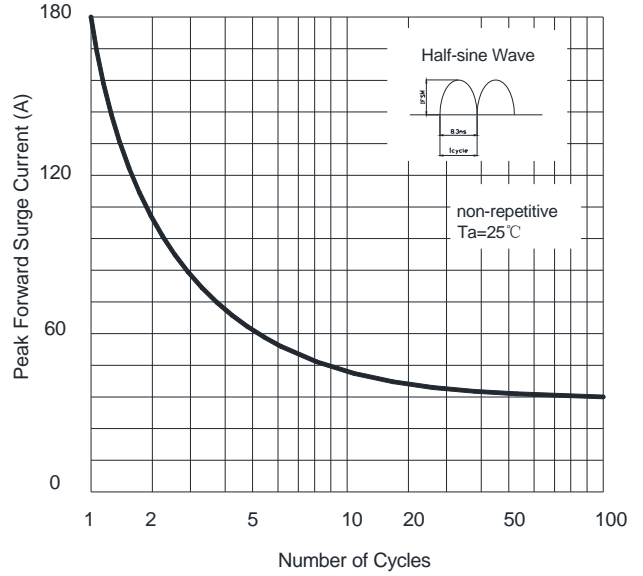


FIG3:Instantaneous Forward Voltage

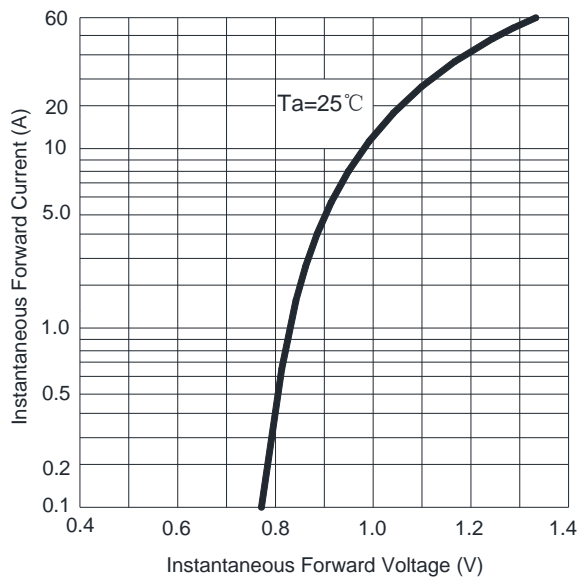


FIG4:Typical Reverse Characteristics

