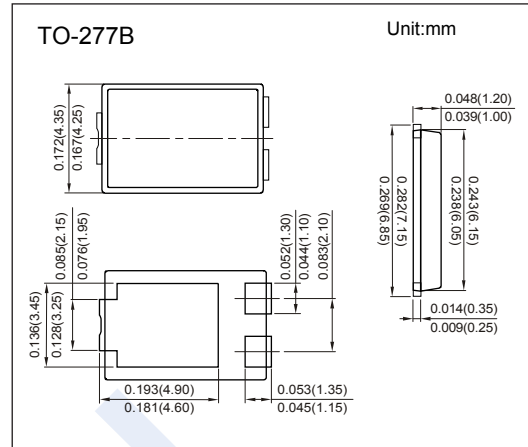
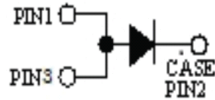


Schottky Diodes

KBR10T45SP5

■ Features

- High current capability
- Ultra low forward voltage drop
- Low power loss, high efficiency
- High surge capability
- High ESD capability

■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Recurrent Peak Reverse Voltage	V_{RRM}	45	V
RMS Voltage	V_{RMS}	32	
DC Blocking Voltage	V_R	45	
Average Forward Rectified Current @ $T_c = 100^\circ\text{C}$	I_{FAV}	10	A
Peak Forward Surge Current @ 8.3ms	I_{FSM}	150	
Thermal Resistance Junction to Case	$R_{\theta JC}$	6.5	$^\circ\text{C}/\text{W}$
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature range	T_{stg}	-55 to 150	

■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	V_R	$I_R = 100 \mu\text{A}$	45			V
Forward voltage	V_F	$I_F = 5 \text{ A}$			0.45	
		$I_F = 10 \text{ A}$			0.6	
Reverse voltage leakage current	I_R	$V_R = 30 \text{ V}, T_A = 25^\circ\text{C}$			0.25	mA
		$V_R = 30 \text{ V}, T_A = 100^\circ\text{C}$			50	
Capacitance between terminals	C_T	$V_R = 0 \text{ V}, f = 1 \text{ MHz}$ (Note.1)			700	pF

Note.1. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc

Schottky Diodes

KBR10T45SP5

■ Typical Characteristics

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

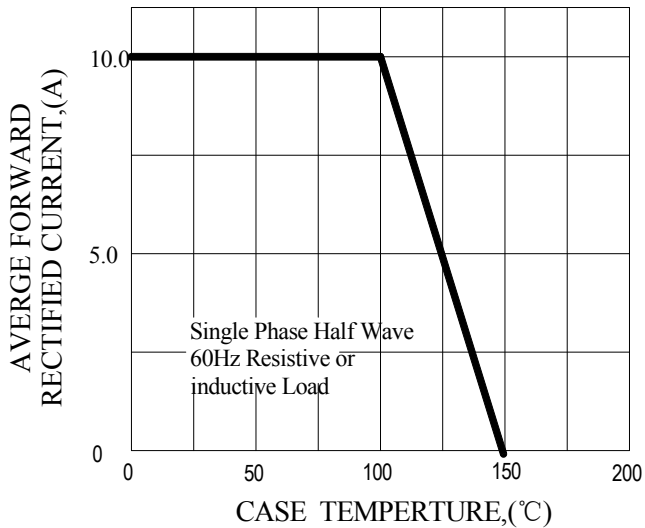


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

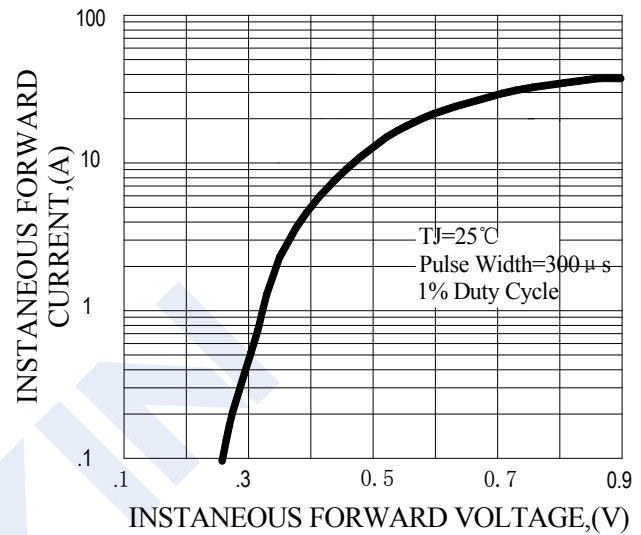


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

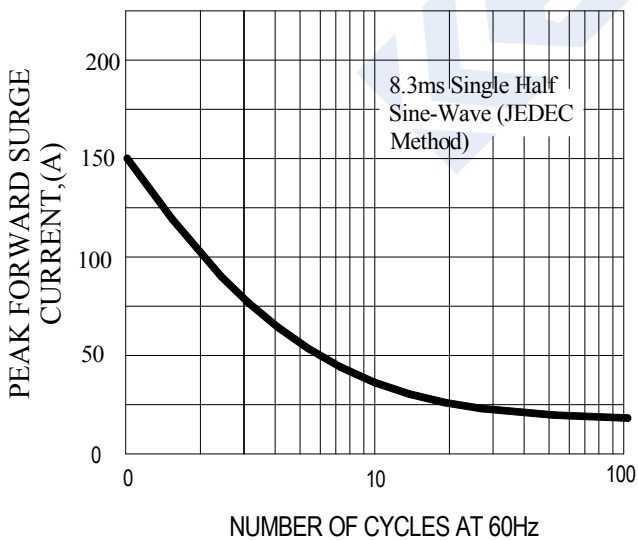


FIG.4-TYPICAL REVERSE CHARACTERISTICS

